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ABSTRACT

Most of California's farms are relatively small, family run operations, and their future has been called into question by current agricultural trends. The Small Farm Viability Planning Project was initiated to identify obstacles to small farm economic viability and make recommendations to the state on policies and actions that might reduce these obstacles. Six task forces investigated technology, finance, training, marketing, community services, and natural resources. Overall, the promotion of family farms can be expected to enrich California life both economically and socially, and creation of increased numbers of viable family farms can be one major means of creating more employment in rural areas. Although training resources for in-school youth (high school through university) are adequate, training resources are extremely limited for out-of-school adults who would like to enter or progress in farming but need instruction in various aspects of farm management. Small farmers are not sufficiently aware of existing marketing outlets available to them, and the marketing task force suggested an information service to help farmers identify brokers who can handle their produce. The finance task force cited the need for financial aid to serve low-equity or beginning farmers. The findings and recommendations of each of the task forces are included along with introductory background material, general policy recommendations, and a discussion of their implications for the state. (DS)

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The Family Farm in California

Report of the Small Farm Viability Project

RC 011 618

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THE FAMILY FARM IN CALIFORNIA

Final Report of the Small Farm Viability Project

ABSTRACT

1. GENERAL FINDINGS AND RECOMMENDATIONS

A. FINDINGS

1. The promotion of family farms can be expected to enrich California life both economically and socially. Creation of increased numbers of viable family farms can be one major means of creating more employment in rural areas.

2. Rural people with low incomes, when provided the opportunity, can elevate themselves economically into decent livelihood through entry into farming.

3. It is possible and practical to enhance the competitiveness of the family farm. Public policy has played a major role in reducing its competitiveness, and public policy can be used to increase it. An effective small-farm policy will emphasize redirection of existing resources toward the family farm, although some new resources and activities probably also will be needed.

B. POLICY RECOMMENDATIONS

1. The State should take an active role in maintaining the competitive position of the family farmer and in facilitating the entry of new farmers.

2. The State should discourage any concentration of economic control over agricultural resources and markets that diminishes the competitive position of the family farmer and impedes the entry of new farmers.

3. A family farm policy should be part of a more general commitment to developing strong rural communities.

    a. Establish rural oversight committees in the houses of the legislature, or perhaps set up a joint committee.

b. Establish in the executive branch a capacity for identifying and analyzing rural and agricultural issues.

c. Improve coordination of State programs serving rural areas, and establish closer working relationships with federal programs.

4. The State should charter a nonprofit corporation to encourage and assist local rural development activities, including the formation of family farms.

II. TASK FORCE FINDINGS AND RECOMMENDATIONS

A. MARKETING TASK FORCE

Small farmers have special needs of the marketing system, and they are more vulnerable than large farmers to imperfections within it. Also, a large portion of them raise perishable crops that are subject to relatively high risk and price fluctuations. This uncertainty is exacerbated by the reluctance of the marketing system to deal in small volumes. Consequently, small producers tend to face higher per unit marketing costs and lower returns.

Three approaches currently are being taken toward alleviating small farmer marketing problems. One seeks to improve the established marketing system, making it more accessible to small farmers and more responsive to their requirements. Another pools small farmer produce through cooperatives, forming larger volumes with which to deal on the market. Still another approach bypasses the traditional marketing system and fosters direct sales by farmers to consumers. None of these methods excludes the others, and each should be expanded to create more marketing options for family farmers. Problems and recommendations identified for each include:

1. IMPROVEMENTS IN THE EXISTING SYSTEM:

a. Small farmers are not sufficiently aware of existing marketing outlets available to them. The Extension Service should establish an information service to help them identify brokers who can handle their produce.

b. Family farmers are not rewarded in the marketplace for what they can do most competitively, which is to produce an exceptionally high quality product. There is growing consumer demand for such a product. The State should establish and promote a "supergrade" of fresh produce for intrastate marketing. This new grade will certify higher standards of maturity and flavor, and it will bring a premium price.

c. Many state regulations governing marketing unnecessarily discriminate against small producers, who are inadequately represented in the drafting and review of such regulations. The Department of Food and Agriculture should routinely investigate the expected effects of such regulations on farms of different sizes, not promulgating rules which needlessly discriminate against small producers. A review board comprised of family farmers should oversee this process.

2. EXTENSION AND REINFORCEMENT OF COOPERATIVES:

a. The existing infrastructure of cooperatives is not adequate to meet small farmer needs. In some places there are no cooperative facilities locally available, and in other cases existing cooperatives are unresponsive to small producers. The State should actively facilitate the establishment and improvement of cooperatives to serve small farmers.

b. Successful cooperatives demand exceptional skill and attention during their formative years, and finding a resource pool of technical assistance willing to work with small farmer cooperatives has proved to be a real obstacle. The State should establish a technical assistance service for small farmer coops, made up largely of persons currently working with small farmer marketing cooperatives. Working part time during the off-season, these persons could assist new and troubled cooperatives.

c. Small farmer cooperatives need a continuing educational program for board, staff, and membership. The University of California Cooperative Extension should implement such a program.

3. DEVELOPMENT OF ALTERNATIVE MARKETS:

a. There is an increasing spread between the prices farmers receive and the prices paid by consumers in retail stores. Much of this increased price spread comes from a growing marketing bill. The State should encourage direct marketing arrangements to enable farmers to capture a larger portion of the retail price. To do this, it should establish an interdepartmental direct marketing task force to set up small farmer direct marketing activities, particularly certified farmers' markets.

b. A direct marketing system will require a flow of adequate research and information to do its job, and therefore the University of California should be encouraged to do research in subjects that can improve direct marketing programs.

B. FINANCE TASK FORCE

In surveying the financing needs of small farmers, the Finance Task Force found that the gaps in availability of funds are more a function of the experience and financial equity of a farmer than of the size of his farm. Adequate financing is generally available for the well established small farmer with years of experience; a shortage of funds exists for the low-equity farmer and for the beginning farmer who has (or contracts for) the requisite skills to run a successful farm but lacks sufficient collateral. The Task Force therefore concentrated its efforts on exploring alternative means of providing financing to the potentially successful low-equity or beginning farmer and low-resource cooperatives.

Only a few lending agencies currently have the ability and the mandate to serve low-equity or beginning farmers. The principal organization in this category historically has been the Farmers Home Administration (FmHA). The Small Business Administration (SBA) recently has joined the FmHA in providing low-equity loans in the rural sector. Other current providers for these farmers include (1) community-based, nonprofit community development corporations, which obtain a portion of their capital from public funding sources, and (2) Business Investment Development Corporations (BIDCOs), also nonprofit corporations, funded by member institutions and designed to promote economic development by spreading loan risk among lenders.

The joint financing capacity of all the sources cited above are inadequate to meet the current and future needs of low-equity and beginning farmers. FmHA alone has a 2.6-year backlog of loan applications, and it is not able to serve cooperatives, which can be a major vehicle for increasing family-farm viability. Neither the FmHA nor the SBA has sufficient personnel to provide technical assistance through supervised credit.

In order to improve and expand the services offered by the existing small-farm finance system, the Finance Task Force recommends that the FmHA and SBA establish complementary programs whereby the FmHA issues guarantees to cover the purchase of farm land and the SBA guarantees loans for operating capital. Both agencies should recognize all kinds of cooperatives and their members as eligible borrowers, and they should institute technical assistance and supervised credit programs. The FmHA could augment its present financing capacity greatly by reducing the reserve it holds against default, retaining only the expected loss from bad debts. It would further increase its effectiveness by adopting a licensee arrangement with local Development Corporations, Small Business Investment Corporations, and the like. The federal government also should consider increased direct funding of the FmHA.

The Task Force further recommends that the State undertake measures to improve the access of family farmers to land. Such measures should (1) ensure that land be sold at prices consonant with earning capacity, (2) establish means of keeping prime agricultural land in farming, (3) consider controls to limit corporate and foreign ownership of land, (4) support implementation of existing Reclamation Act provisions, and (5) facilitate the long-term lease of public lands to small farmers.

The Task Force also believes that the use of the federal tax preference rate on capital gains as applied to agricultural lands should be restricted, either by eliminating it altogether or by increasing the mandatory holding period beyond one year. The tax preference on income derived from capital gains induces investors to purchase land in the expectation of capital appreciation. This bids up the price of agricultural land and effectively keeps many potential small farmers out of farming, since the land's productive capacity is frequently insufficient to cover the indebtedness incurred to purchase it.

Even if the above recommendations were implemented, however, the financing available to low-equity and beginning farmers would be inadequate to meet present or future needs. Therefore, the Task Force recommends that the State take positive action toward the encouragement of the family farm by instituting the following measures: (1) creation of a Rural Development Office to serve as a public advocate for family farmers, to disseminate information about programs designed to aid them, and to conduct studies, write legislation, and coordinate small-farmer programs when they are enacted, and (2) creation of a financial and technical assistance institution to serve the needs of small farmers. This institution would be able to make grants and subsidized loans to farmers who lacked access to existing lending resources. It could also leverage outside capital and provide technical assistance, either directly or by contracting with local agencies.

C. TRAINING TASK FORCE

Because farming is both a science and a business, the family farmer must have a solid knowledge of production processes, management, and marketing. Once he has acquired this basic knowledge, he is obliged to keep constantly abreast of new developments that affect his productivity and efficiency. To do this, he must know how to make use of all available informational resources, including government agricultural agencies and their publications, public and private educational institutions, and technical assistance provided through businessmen and bankers.

Only for in-school youth, from high school through community college and the university, are training resources to prepare for independent farming adequate. For out-of-school adults who would like to enter farming but need instruction in specific production areas, marketing, or management, and for present low-resource farmers who need to sharpen their skills in order to make their farming operation more profitable, training resources are extremely limited. Community colleges, Regional Occupational Centers and Programs, and private, nonprofit, community-based organizations have the greatest flexibility to serve them, but their financial resources and outreach capacity are inadequate.

For the established family farmer, private-sector resources such as lending institutions and commercial operators are important sources of information. The University of California Cooperative Extension Service should be an equally valuable resource, and it does in fact serve those farmers capable of seeking out its agents. Unfortunately, many small farmers are unaware of the services that the Cooperative Extension Service offers, and very few extension agents have the time to identify and seek out the family farmers in their area.

The Task Force believes that all farmers, from the new entrant with limited experience and incomplete knowledge, to the university graduate who needs little or no assistance in keeping abreast of new developments, should have access to the skills and information they need. This implies a general commitment by the public sector to augment the educational services provided specifically to small farmers by three major entities: the University of California Cooperative Extension Service and agricultural research program, the formal education system, and community-based organizations. Comprehensive, intensive training should be available to the least prepared segment of the family-farmer population, and less intensive, more occasional services to the more advanced family farmer. Adoption of such a family-farmer training policy would require the relaxation or revision of the many regulations that currently restrict the innovative use of public funds for small-farmer training.

Where organized training programs are involved, the Task Force makes the following specific recommendations:

- Training programs must be integrated with financing mechanisms for land and production capital and with marketing programs.
- Training must be conceptualized as a long-term undertaking, of at least two or three years' duration.
- Training programs should be designed to provide a subsistance allowance until the farmer's own cash flow from agricultural production becomes adequate to support his family.

- The allowance or stipend system should be coordinated with the existing welfare payment system toward the end of making more positive use of available welfare funds. A family farmer should not be excluded from training or access to subsistance allowances if his income is above the government determined poverty line or if he has an equity investment in land or equipment. Rather, a flexible system of subsistance allowances should be devised that would supplement each participant family's income to the extent necessary in order to provide a total amount representative of a moderate income. A system could be developed involving private-sector bank loans for participants already making moderate incomes and individually determined allowances for low-income participants.

- Training programs should emphasize the need that small farmers have for cooperative action, especially in the area of marketing, if they are to compete with large growers.

- Training programs must have a bilingual capacity for the benefit of the non-English speaker.

- A State policy should be established for the preparation and publication of basic, learner verified instructional materials pertinent to the needs of small farmers and published in the native languages of all significant segments of the small-farmer population.

- Increased use must be made of appropriate instructional hardware, along with appropriate software developed locally.

- Because of the present shortage of trainers capable of relating effectively to the client population, programs must be developed to prepare trainers and give them professional status. Consideration should be given to accredited internships and apprenticeship programs and to more extensive use of the peer training concept.

The Task Force's final recommendation is that a mechanism for information collection and dissemination be established for family farmers, supported by public funds. Equally important is the evolution of networking among providers and consumers of training. The existence of such a network would facilitate the exchange of information and would create a power base for advocacy of family-farmer interests and needs.

D. TECHNOLOGY TASK FORCE

Under conditions of present agricultural technology, family-size farms can be economically viable and profitable even when they are not "optimal." The evidence indicates that their production costs approximate the production costs of larger farms. The most recent data shows that family farmers tend to achieve lower unit production costs than do larger farmers in vegetables, fruits, and nuts (crops raised by most of the State's family farmers). Larger farmers, on the other hand, achieve slightly lower unit production costs in cash grains. The main competitive advantage enjoyed by large farms is not lower costs, but higher incomes through greater gross sales per acre. The reasons for this income differential are not clear from the data, but experience and the literature suggest that it stems primarily from a favored position large farms have in marketing their products. This implies that the small farmer probably is disadvantaged less by technological factors than by institutional factors.

The task force estimated approximate acreages needed to produce $15,000 of income to a family for different agricultural commodities. Two data bases were used to derive these estimates:

1. University of California Cooperative Extension cost sheets. These figures assume (a) 1975 prices, and (b) the family contributes all the labor. It appears from them that a $15,000 income is obtainable on 50 acres of most vegetable crops or 60 acres on most fruit and nut crops. To the extent hired labor is used, the acreage must be expanded.

2. 1974 Census of Agriculture for California. These figures assume (a) 1974 prices, and (b) the family contributes only 1.5 worker years of labor, hiring the rest. These data suggest $15,000 could be earned on approximately 59 acres of vegetables, 100 acres of fruits and nuts, or 144 acres of irrigated cash grains.

The years 1974 and 1975 were characterized by strong commodity prices. Substantially lower prices would correspondingly reduce or eliminate income from these acreages. Prices are very important to family farm viability.

Although more efficient use of modern agricultural technology does not account for most of the competitive edge enjoyed by large farmers, it does account for a part of it. For example, large farms achieve lower per unit costs in their use of machinery and fertilizers. If small farmers could improve their relative efficiency in utilizing modern agricultural technologies, they could to some extent improve their overall competitive position. This is particularly true of mechanical technology, where the development of versatile equipment appropriate to small acreages and of practical arrangements for spreading equipment use between farmers could have major economic benefits. Other technological areas in which solutions need to be found for small farmers include pesticides and fertilizers, integrated pest management, plant breeding, irrigation, post-harvest cooling, farm management, and cooperative organization.

The University is the main publicly supported institution developing agricultural technology. Therefore, it would be the principal focus of policy aimed at developing technology more applicable to small farms. The task force recommends:

A. University research on farm technologies:

1. The university should establish a new set of goals which emphasize a commitment to the welfare of smaller, family farmers, farmworkers, and rural communities.

2. The hiring, firing, and promotions of researchers should be based upon explicit recognition of the researcher's performance on work related to these new goals, as well as to traditional goals of departments.

3. Annual public disclosure should be made of all current research activities of the Experiment Station.

4. Discretionary funds should be allocated specifically for the purpose of encouraging researchers to undertake new, and perhaps risky, types of research dealing with small farm technology and related issues.

5. The present use of private funds from interested agricultural industries for particular kinds of research should be subjected to a strict review process.

6. University teaching responsibilities should include practical instruction in farm management and production techniques applicable to the family farm.

B. Cooperative Extension Services:

1. The allocation of extension research and support activities should be subject to new goals and priorities similar to those described in recommendation A. 1.

2. The concept of farm advisors to help serve small farmers, piloted under Title V of the Rural Development Act, should be further developed.

3. The Extension Service should develop a more holistic perspective of the farm as a complete system.

4. Cooperative Extension should offer advice on organizational technologies which allow the individual farmer to plan and cooperate with other family farmers in the production and marketing of his crops.

5. The Extension Service should actively help devise delivery systems of agricultural services which do not discriminate against the small farmer.

6. Important information documents should be printed in Spanish as well as English, and there should be more Spanish speaking agents.

C. The Department of Food and Agriculture

1. The Department of Food and Agriculture should establish a unit to assess the impact of various regulations on the viability of smaller farmers.

2. The Department of Food and Agriculture should collect information on the planting and harvesting of all specialty crops commonly grown by small farmers.

D. Government Price-Setting Agencies:

Agencies influencing or regulating commodity prices should establish pricing policies that will include an objective of protecting family farmers.

E. NATURAL RESOURCES TASK FORCE

The Natural Resources Committee[1] has examined the different effects of various resource management policies on family farms and larger-than-family farms and has also investigated the environmental effects of large and small farms. The principal charge of the Committee, however, was to determine the effect of public resource management policies on the future viability of small family farms. Although the definition of a family-sized farm will vary as different crop and livestock operations are considered, several general observations can be made.

The first observation of note is that costs of production and profitability do not appear to change significantly as the size of operation varies. A recent analysis of data from the 1974 farm census in California shows that farms in three major categories having gross sales between $20,000 and $40,000 annually showed profits nearly identical to those of much larger operations with gross sales ranging from $40,000 to $100,000. Data also indicate that large and small farms produce roughly equivalent tonnage per acre of a given crop. Production depends more on factors like soil quality, water use and climate than on the relative size of a farm.

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[1] Editor's Note: The Natural Resources Task Force throughout this document refers to itself as a Committee.

A second observation is that experience and some research show a tendency for larger farms to substitute capital and resources for labor. Economic factors are largely responsible for this trend. Since large farms depend more heavily on hired management and labor, managers have traditionally sought to minimize the hours of labor required. This trend has been slowed somewhat by the tendency of smaller farmers to adopt the technologies of their larger competitors and by the rapid increases in costs of energy, machinery and other nonfarm inputs during recent years.

Management is a critical factor in any farming operation, whether large or small. The family farmer, who is both manager and laborer, has an opportunity to observe the results of his management decisions more closely and to supervise the implementation of his decisions. The family farmer must also make a commitment to the long-term productivity of his property as the principal (and often the only) asset of his estate. However, the farm manager, who is more common to larger farms, is judged primarily on his ability to show a maximum profit each year. It is reasoned, therefore, that given comparable skills, the family farmer has incentive to be more frugal with his resources and is more likely to accept short-term sacrifices, if necessary, to maintain the long-term productivity of his farm.

The role of public institutions managing agricultural resources is critical. Policies applied to the management and use of these resources will largely determine the distribution of benefits derived from their development. In formulating management policies, public decision-makers must consider the immediate social and economic effects of resource distribution as well as their effects on future generations. The Natural Resources Committee has formulated both general and specific recommendations for resource management.

The Natural Resources Committee has recommended that the State establish a land transfer fund to help new farmers acquire access to land and that the State also take an active part in the transfer of "excess" lands sold under federal reclamation law. The Committee has also recommended that water policies be amended to recognize the differences between large and small farmers in water distribution. New technologies will be needed to protect soil quality and reduce the heavy dependency of agriculture on fossil fuels and chemicals.

All of these recommendations are discussed fully in the report. The essence of the report, however, is that state, federal and local governments now play key roles in the management of resources vital to agriculture. If the family farmer is to survive, all levels of government will have to be more sensitive to the effects of their management policies on him.

F. COMMUNITY SERVICES TASK FORCE

The Community Services Task Force has analyzed the relationship between the family farm and the farm community. Much of the information presented in the report is based on sociological and economic studies conducted by the University of California. These studies show that where small family farms predominate there is more development of rural communities, and the quality of community life is better. Such communities have a higher volume of business activity, better schools and other public services, greater stability, and more social activity. The studies also show that these relationships between farm size and community character hold constant over time.

The Task Force has focused its attention on the problems facing local governments and on mechanisms to strengthen the hand of local officials in confronting these problems. Local government is the principal agent for broad social and economic change in a community, and it is vital that State and local governments work closely together.

The Task Force has made recommendations for changing political and fiscal relationships between the State and rural communities as well as recommendations for promoting economic development. The objective of these recommendations is to help rural leaders overcome some of the institutional barriers to development that now confront them. The Task Force has reached a consensus that these recommendations will help to strengthen the rural community as a necessary support to the family farm.

I

Background and Overview

THE FAMILY FARM IN CALIFORNIA

FINAL REPORT

SMALL FARM VIABILITY PROJECT

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I.

INTRODUCTION

This report addresses one question: "What can be done to increase the viability of family farms in California?" The issue is important because most of California's farms are relatively small, family-run operations, and their future has been called into question by current agricultural trends. This report identifies obstacles to small-farm economic viability and suggests what can be done about them.[1]

It is the final report of the Small Farm Viability Planning Project, which was initiated in response to public and government concern about the future of the family farm and the persistance of serious economic and employment problems in rural areas. The idea of a special study originated with a nonprofit organization working with small farmers, and was further developed by agencies having responsibility related to agriculture, employment, and economic development in rural areas. The project was conducted as a cooperative effort of the Employment Development Department, the Governor's Office of Planning and Research, the Department of Food and Agriculture, and the Department of Housing and Community Development. It was largely supported by a grant from the Office of Economic Development of the Community Services Administration. Other state, federal, and local organizations also contributed very significantly to the effort.

Despite the name of the project, this report is not intended in any way to represent a formal "plan." Instead, it takes the more modest approach of indicating policies and actions which would reduce certain important obstacles to the viability of small farms in California. It also presents some findings regarding the social impact that could be expected were productive small farms to proliferate.

The project drew on the perspectives and expertise of many people, which was necessary because of the complexity of the subject. Therefore, most of the work was conducted through task forces. More than 80 individuals from many backgrounds participated, all of whom were chosen for their knowledge of some aspect of the subject matter and their interest in family farm problems. A complete list of the task force participants immediately precedes the task force reports in the second section of this document.

The task forces were given complete independence to investigate their subject and make their recommendations to the State as they best saw fit. Therefore, the task force reports included in this document are reproduced exactly as developed and approved by the task forces. They represent recommendations to the State, not by the State.

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[1] The terms "family farm" and "small farm" are used interchangeably throughout this report. A full definition appears later in this chapter.

There were six task forces, each of which dealt with a specified problem area. They were:

- Technology; addressing the question of how to develop crops, equipment, methods, and research programs appropriate for small farm conditions.
- Finance; inquiring into a broad range of agricultural finance issues.
- Training; assessing the skills and information required by small farmers and determining how best they might be acquired.
- Marketing; identifying marketing systems and policies that best serve small farmer needs.
- Community Services; investigating the links between small farm viability and community vitality, services, resources, and infrastructure.
- Natural Resources; exploring the land, water, and energy use implications of small farms.

The task forces had to cope with a dismaying lack of data regarding small and family farm operations in California. In many cases, therefore, personal expertise of the task force members had to serve as a basis for analysis and recommendations. In some instances, the task forces conducted original surveys and case studies on their own in order to fill some of the most critical information gaps. While some such studies are included in the task force reports, others will be released separately in a companion volume to accompany and supplement this report.

DEFINITION OF THE "SMALL FARM"

For purposes of the Small Farm Viability Planning Project, the "small farm" is one on which:

- the farm family relies on the farm income for all or a substantial portion of the family livelihood; and
- the farm family individually or in partnership with other farm families controls and operates the farm, contributing at least half the farm labor except in peak seasons; and
- the present family income from all sources is not more than moderate.

In addition to families already farming, the project was concerned with the problems of persons attempting to enter agriculture as small farmers. The aspiring family farmer is defined as one who:

- is already agriculturally experienced; and

- intends to rely on farming for all or a substantial portion of the family livelihood; and

- intends for the family to operate the farm, contributing at least half the labor, except during peak season; and

- is of low or moderate income; and

- is actively seeking to become established, either independently or in partnership with others, as a farmer.

Some of the task forces, in order to focus their efforts, adapted or refined the above concepts of the family farmer to meet their specific needs. However, over time this general definition proved to be the most useful. It was found to be more workable than other commonly used criteria (annual gross sales, farm worth, acreage, etc.).

ORGANIZATION OF THE REPORT

This report consists of two sections. The first presents introductory background material, some general policy recommendations, and a discussion of their implications for the State. The second section is made up of the reports of the individual task forces. The two sections complement each other, and both need to be read in order to cover all the recommendations of the project. An abstract of all the recommendations is enclosed, however, for the reader's convenience.

A selection of working papers from the project will be published separately at a later date.

II.

FAMILY FARM POLICY AND CALIFORNIA AGRICULTURE

> It is declared to be the policy of the Congress to promote... a sound and prosperous agriculture and rural life as indispensable to the maintenance of maximum employment and national prosperity. (Agricultural Research Act, Title 7, Chapter 17, Section 427; later repeated in Hatch Act Section 361 and elsewhere.)

This is the fundamental statement of national agricultural policy. It holds that enhancement of agriculture and rural life shall serve two principal societal goals: "maximum employment" and "national prosperity." The promotion of rural life is as important as the promotion of agriculture. This policy remains in effect today, and is buttressed and supplemented by the language of various subsequent acts. Unlike Congress, California has not defined in statute what it wants agriculture to do for its society, and hence it has not adopted an agricultural policy of its own. At the same time, it is developing in directions inconsistent with the family-farm vision underlying federal policy.

This introductory section of the report will summarize briefly the development of national family farm policy, the evolution of California agricultural patterns, and the situation of the family farm in this state today. This is to provide essential background material which will aid in understanding the portions of the report which follow.

THE FAMILY FARM IN NATIONAL POLICY

The family farm has been a cornerstone of American society throughout the nation's history, for it was largely in colonial agricultural settlements that the principles of modern democracy and self-reliance were born. Thomas Jefferson insisted that there is a direct link between a thriving rural society and the vigor of democracy, and he concluded that "The small land holders are the most precious part of a state." He felt society should value and protect the fierce independence of people who provided for their own needs by working in partnership with nature on their own land. Although farming has changed dramatically over the intervening two centuries, American farm families have conserved the value of independence and self-reliance admired by Jefferson.

Congress has long recognized the social value of the family farmer, and hence has chosen to implement its agricultural policy largely through encouragement and advancement of the family farm. Since the last century, virtually all major acts relating to agriculture have reiterated the strong national commitment to the family farm as the production base of American agriculture. For this reason, the establishment of viable farm homes and communities has traditionally taken precedence as a policy objective over the provision of inexpensive food and fibre.

Many kinds of programs have been enacted to help maintain the family farmer in American society. Homestead laws deeded public lands only to families who would themselves settle and farm the land, a concept later applied to other publicly financed resources such as water, power, and credit. Education pertinent to the needs of farm families was encouraged from early in the last century, flowering in the great land grant colleges and universities common across the U.S. today. Of particular importance to California was the opening of new lands to intensive agriculture through federally funded water projects. Federal reclamation law, which was written with California specifically in mind, stated the family farm and rural settlement objectives in strong terms, limiting farm size to an acreage then felt to be sufficient to support a farm family. Some of the above programs were marred by fraud and speculation abuses, but their basic policy purpose--to build farmstead homes and to provide economic opportunity in rural areas--remained unchanged.

IMPACT OF THE NATIONAL POLICY IN CALIFORNIA

From the beginning, California has proved a difficult, persistant obstacle to implementation of a national policy emphasizing the family farm. By the time California became a state, most of its productive lands already were in private ownership, much in enormous tracts originally granted by the Spanish and Mexican governments. Under the new U.S. government, this pattern of concentrated land ownership continued, but not without protest.

Starting in the 1860's, there was a series of riots by "squatters," who were farmers migrating to California only to find that little decent farmland still was available for homesteading. By the end of the nineteenth century, a pattern of large landholder dominance inconsistent with the national policy had become well established in the state, and it was a major factor in the type of agriculture California subsequently developed.

During the twentieth century, the very nature of California agriculture has been dramatically transformed from the original dry land pastures and grain farms predominating in the 1800's. Irrigation was adapted to California in the San Joaquin Valley, and this state now enjoys the most extensive flood control and irrigation network ever built. Although in many areas irrigation has been developed privately by farmers and their water districts, much of California's richest cropland has been brought into irrigation only through billions of dollars of Federal and State expenditures. During this transformation, California built a superb university research capability, followed by an extension system, to support and advance this more technological agriculture. This system was established almost entirely with public funds, primarily through the federally financed land grant colleges under their mandate to serve family farms and enhance the quality of rural life.

Today California enjoys a varied, sophisticated, and productive agriculture that is unmatched anywhere. It is the nation's leading agricultural state. It also has an unsurpassed public investment in that agriculture. In return, agriculture has been a major stimulus to the state's economic development.

PROBLEMS IN CURRENT TRENDS

In recent years questions have been raised from various quarters about where current trends in California agriculture are leading. The concern has been expressed that certain aspects of these trends may be unnecessary, harmful to society, and inconsistent with federal policy and law. These questions include the following:

- Has California agriculture become so concentrated that only a small percentage of producers reap most of the benefits of public subsidies, while they "export" their costs to society?
- Are lower costs claimed for large farm units reflected in fact at the retail level in lower prices, better quality food, or other benefits to the consumer?
- Are small farmers and farmworkers being displaced from employment at least in part through the investment of taxpayer dollars in research benefitting primarily large producers, despite the national policy goals of maximizing employment and enhancing the quality of rural life?
- Have avenues of entrance into farming been cut off for farmworkers, children of small farmers, and others traditionally qualified to attain ownership participation in the state's major industry?
- Is the replacement of family farms by much larger farms leading to the social and economic impoverishment of rural communities?
- Is a way of life being unnecessarily lost which has been a major contributor to the richness and values of this nation?

Perhaps the most important question of all is whether government has an obligation to keep alive the rural option for family self-reliance.

THE FAMILY FARMER IN CALIFORNIA TODAY[1]

Most of the state's farms are small operations managed by families. However, a few very large farms dominate the market and occupy most of the best land. This concentration of essential markets and resources is one of the most important realities with which the small farmer must cope, for it means that he constantly deals with a system oriented primarily toward serving the larger producers.

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[1] Unless otherwise noted, data in this section are from the 1974 Census of Agriculture. All computations include only farms having gross sales of $2,500 or more, which is the only broadly applied census category weeding out the smallest and relatively unproductive farms. This does not mean to imply that a farm having gross sales of $2,500 is economically viable, but it does tend to make comparisons between large and small farms more conservative by focusing only on units having some economic importance. There are 50,763 farms in this category, as opposed to 67,674 in the total count. Even this grand total omits about 6,000 farms which appeared in the preliminary census data but were eliminated when the definition of a farm was made more rigorous for purposes of reporting the 1974 data.

Market Concentration

Most of the state's agricultural production comes from a few very large farming operations. Just 5% of California's farms, having annual sales volumes of $500,000 or more, command a 61% share of all agricultural commodity sales. They sell:

81% of vegetables and melons;
79% of cattle and calves;
75% of poultry and poultry products;
66% of cotton and cottonseed;
63% of nursery and greenhouse commodities;
56% of all grain;
51% of dairy products;
48% of hay, feed seeds, forage, and silage;
34% of fruits, nuts, and berries.

By comparison, the 77% of all farms having gross sales of less than $100,000 per year have only 13% of the market. Among the major commodity classes, they command the greatest share of the market in fruits, nuts, and berries--but even there that share is only 36%. They obtain only 3% of the vegetable and melon business, which is both one of California's largest commodity markets and well suited to family farm production operations, although its risks are relatively high.

Land Concentration

There is a common misconception that most California farms are rather large, and sometimes this myth is perpetuated by reference to the fact that the average farm acreage is now over 600 acres. Actually, it is misleading to refer to the average farm size at all. One reason is that this figure is skewed upward by the presence of a few extremely large farms. Another reason is that it encompasses cattle ranches as well as orchards. If the average farm acreage is to be cited at all, reference also should be made to the fact that on irrigated land the average farm size is under 200 acres.

It is far more revealing to observe that fully 84% of California farmers work less than 500 acres, 71% farm less than 180 acres, and 47% have less than 50 acres.

Despite the fact that most farmers till relatively small to moderate acreages, most of the land is taken up by a small percentage of the farms. This is evident when considering irrigated land, which is the most productive land in the state.[1] Only 10% of the farms have 1,000 acres or more, but this 10% takes up 57% of all California's irrigated land. On the other hand, only 12% of the irrigated land is taken up in farms of less than 180 acres. On that 12% of irrigated land is found the majority of all the state's farms.

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[1] The Census reports a total of 7,644,326 irrigated acres, which is below the more commonly used estimate of nearly 9,000,000 acres.

Given the enormous investments of taxpayer dollars in the expansion and improvement of California agriculture--especially in the great irrigation projects--there does appear to be ample reason for government to review how the benefits of its tax dollars are being distributed. It is important to remember that a pattern of concentration tends to apply nationally, and in this regard California differs more in degree than in kind.

FARMING AS A SOURCE OF EMPLOYMENT

Most farmers in California depend on farming as their principal source of family livelihood. Only about one quarter of all farm families report receiving income from the outside that is greater than what they earn from farming. Nevertheless, a large portion of farm families in all farm size categories receive at least some outside income.[1] The census indicates that over two thirds of the state's farmers list farming as their principal occupation.

Farming has been in a long-term decline as a source of employment for rural families. During the last nine years, according to Employment Development Department figures, about 15,000 farmers and their family members have lost employment on their farms.[2] This employment loss comes in part from a decline in the number of farms. In California, this decline has proceeded at a rate of well over 1% per year. All sizes of farms are affected--not just small farms--and it is likely that urbanization accounts for a substantial portion of these losses. The rising productivity of labor in agriculture also plays a role, so members of a family formerly living from a farm may be pushed out while the farm operation itself remains intact.

While the number of self-employed farmers and their family members has been steadily falling, the number of hired farm workers has been rising (Figure 1). The little study done on the effects of this trend implies that it saddles society with substantial costs. The reason seems to be that relatively self-reliant farm families are being replaced in agriculture by seasonal workers who, since they are out of work part of the year, consume more community services while contributing less tax revenue toward support of those services. Tax data also show family farms proportionately pay more taxes than do large farms. Thus, a trend toward larger farm size

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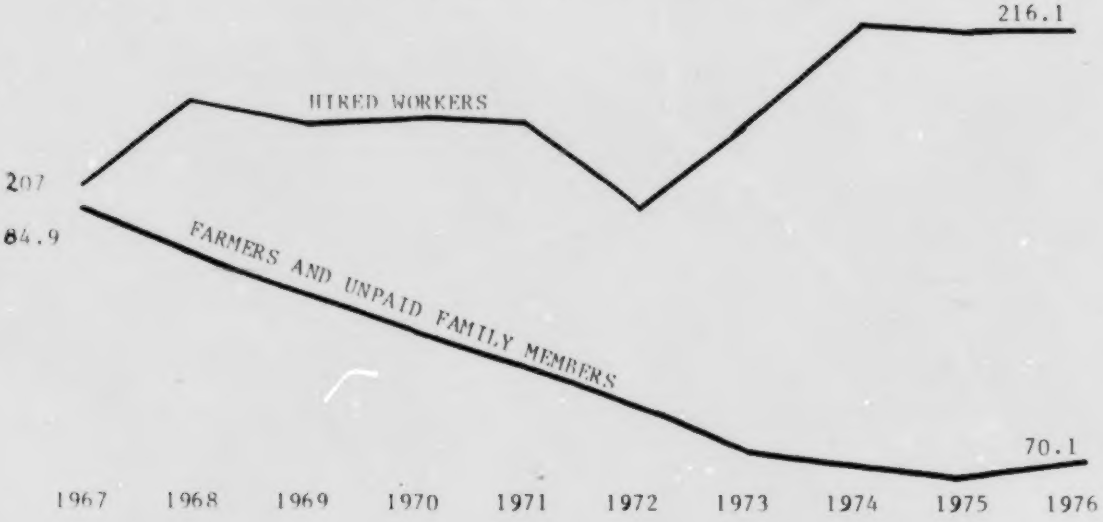
[1] The percentage varies from 43% for families farming over 500 acres to 66% for farmers working less than 180 acres.

[2] While Employment Development Department data indicate the number of persons employed, they do not cast light on the income or quality of employment for the farmer and his family.

Figure 1

CALIFORNIA AGRICULTURAL EMPLOYMENT
Annual Averages, 1967-1976 (In Thousands)



Source: State of California, Employment Development Department
Employment Data and Research, Report 881-X, January 1977

may augur increases in the demand on social services--especially on transfer payments such as welfare and unemployment insurance benefits--while simultaneously eroding the tax base.

Figure 1 suggests that the decline in farm family employment is slowing, or perhaps even reversing. Also of interest is the fact that the growth rate in the percentage of farms having 1,000 acres or more has been slowing. These new tendencies have appeared only in the last few years, and it is too early to ascertain whether or not they indicate major departures from trends of the last several decades.

Almost unsurmountable problems face individuals attempting to get started in farming. In California, as all over the U.S., it is becoming difficult to become established as a farmer. About two out of every three farms now sold are purchased by other farmers expanding their current operations. New farm formation is at a low ebb. Few aspiring entrants can successfully compete for the financing needed to capitalize a new farm unless they already are backed by larger amounts of equity than most young families or workers can be expected to accumulate.

Until the last couple of decades there was an informal "farm ladder" which allowed able and hard-working people to progress from being a field hand, up through supervisory positions, to eventual establishment as an independent farmer. By now that ladder has virtually disappeared. This leaves talented and ambitious farmworkers stranded in relatively dead-end jobs. It drives others out of agriculture altogether, and pours them into labor markets already suffering from high unemployment rates. The disappearance of the opportunity for people of low or moderate income to become farmers results in the waste of human resources which otherwise might be contributing more productively to the welfare of society.

The reduced opportunity to make a living in farming comes at a time when California's rural people face already severe employment problems that are growing worse. Federal and state data indicate that, in proportion to the population residing there, unemployment, underemployment, and poverty are considerably more prevalent in rural areas than they are in urban areas or in the state as a whole. There are several causes:

- A tight labor market statewide and nationally has reduced opportunities for rural people to find adequate employment elsewhere.
- In certain regions, traditional economic bases have fallen into serious decline and are not being replaced by new ones.
- In some areas of the state, continued industrialization of agriculture now is displacing farmworkers from employment, either by reducing the amount of time they can work or by removing job opportunities altogether.
- Urban people migrating to rural areas have increased competition for local jobs without creating a proportional increase in the number of jobs available.

On the whole, it is reasonable to expect unemployment in rural areas to increase during the foreseeable future unless major steps are taken to curb it.

FAMILY FARM EFFICIENCY

Sometimes it is claimed that family-size farm units are inherently less efficient than large farms, and that consequently an agriculture based on them would mean significantly higher prices to the consumer. This argument has broad public acceptance, but the evidence as a whole does not support it. The following should be noted:

- Various university and U.S. Department of Agriculture studies have concluded that most economies of scale are obtainable on well run, modern, family-size farms.
- Most production cost and income comparisons have been based on hypothetical farm budgets rather than on systematically collected and analyzed field data. There is considerable reason to suspect that well

managed family farms achieve costs significantly under those imputed to them in these hypothetical budgets. Moreover, labor and management often are imputed as costs, whereas in reality they are an income stream to the farmer and his family for such labor and management as they contribute.

- When correcting for inflation, the 1974 census data suggest that the family-size farm is now holding a more or less constant share of the market, and that the profit margin of farms grossing around $40,000 in certain major crop categories is roughly equal to the profit margin of far larger farms. In 1974--a year of especially good farm prices--a $12,000 net farm income to the family might well have been associated with about 80 acres largely planted in fruits, nuts, vegetables, or melons.

- There is little evidence that cost savings to the farmer are passed on to consumers in the form of lower prices. This is not surprising since the farmer is a price taker, not a price maker, and hence has no control over what the consumer will pay.

In short, there is scant evidence that large farms provide any particular social benefit to a greater extent than do well managed, smaller family farms, provided these family farms are large enough to obtain essential economies of scale.

While well structured and properly run family farms may be able to compete successfully with far larger units in efficiency of on-farm production, they tend to be at a disadvantage in competing for resources and markets. The various task force reports (see especially the Marketing and the Finance Task Force reports) detail the problems encountered by the small farmer in competing for outlets, information, land, financing, and other necessary resources. What is within his control, he does reasonably well, but he is vulnerable at those points where he must depend on others. Government rules and programs are very important in determining who shall have priority access to markets and resources, and as now implemented they often favor the large farmer rather than the family farmer.

THE FAMILY FARM AS A WAY OF LIFE

One of the points which farm families most consistently emphasize is that farming is much more to them than a mere business; it also is a highly cherished way of life. This can be glimpsed in the responses to two items on a questionnaire administered to 74 small-farm operators.[1]

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[1] See Appendix B of the Marketing Task Force report for the summarized findings of the questionnaire. The sample was taken primarily from farmers responding to the 1976 direct marketing "hot line" in the Department of Food and Agriculture.

- Does farming provide you with an adequate return to your labor and capital resources?

  Yes: 40%   No: 60%

- Does it provide you with a satisfactory quality of life?

  Yes: 89%   No: 11%

There is some question as to whether it is in the public interest for a major class of people to purchase a satisfactory quality of life at the expense of a fair return on their labor.

CHALLENGE OF THE FUTURE

At this moment California may be poised on the threshhold of important new changes in its agricultural structure. Recent court decisions and administrative rulings have raised the prospect that nearly two million acres of the most productive farm land may over the next ten to fifteen years be broken into smaller parcels for sale to family farmers. So significant a shift in land tenure on approximately one quarter of the state's irrigated land will have profound effects for many years to come. If it is permitted to occur haphazardly, major economic and social dislocations could result. On the other hand, careful handling of this change might make of it a unique opportunity to broaden the base of ownership participation in agriculture, to create attractive employment for thousands of families, and to encourage the kind of rural development that will protect and advance the society and economy of this state.

How will California deal with these changes, or with other equally important agricultural issues? How will it decide who should be the beneficiaries of public expenditures? How will it determine the proper roles of government and of the market? How will it devise criteria against which to measure success or failure? The time is appropriate for California to consider its policy in a changing agricultural environment. Perhaps most importantly, it needs a policy to define the place and priority of the family farm in this, the nation's most bountiful agricultural state.

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[1] See Appendix B of the Marketing Task Force report for the summarized findings of the questionnaire. The sample was taken primarily from farmers responding to the 1976 direct marketing "hot line" in the Department of Food and Agriculture.

III.

TOWARD A FAMILY FARM POLICY FOR CALIFORNIA

It is recommended that the State of California make the following commitment:

> It is declared to be the policy of the State of California to promote the family farm as indispensable to a sound agriculture and a prosperous rural society.

One purpose of this policy is to enhance the social and economic vitality of the state's rural communities. Another is to maintain the choice in rural areas for family self-reliance through self-employment in agriculture.

BENEFITS OF A FAMILY FARM POLICY

A major finding of the project is that the promotion of family farms can be expected to enrich California life both economically and socially. Creation of increased numbers of viable family farms can be one major means of creating more employment in rural areas.

A project task force investigated the relationship between the quality of social and economic life in rural communities and the predominating size of farms surrounding them. This research included a recently completed survey of 130 communities in the San Joaquin Valley. The task force found that communities with economies based on family farm agriculture are more prosperous and desirable to live in than are communities based on large-farm agriculture. It interpreted the evidence to indicate that small farms generate more local business, higher levels and diversity of employment, and superior governmental services. The evidence of this is so substantial that the burden of proof now rests with those who would argue otherwise. This means that a properly implemented policy of encouraging the creation of soundly structured and well managed family farms can be expected to bring tangible economic and social benefits to the residents of rural communities and to the state as a whole.[1]

The project also found that rural people with low incomes, when provided the opportunity, can elevate themselves economically into decent livelihoods through entry into farming. One task force documented the climb of 51 farmworker and sharecropper families from poverty and seasonal unemployment in 1971 to well remunerated self employment as farmers in 1976. This was accomplished through the vehicle of a farmer cooperative, but could not have occurred without initial government assistance in the form of loans and training. Opportunities of this nature are rare, because the right kind of assistance is seldom available. However, this and other current experiences of a like mode suggest that more such success stories are possible. There is reason to believe that among the rural poor are many individuals who can become successful and contributing farmers if they are fortunate enough to have access to the proper training and financing services.[1]

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[1] See the report of the Community Services Task Force.

The long term health of the State's agricultural economy should always remain a top priority policy consideration. The evidence suggests that judicious encouragement of viable family farms will improve the overall productiveness and competitiveness of California agriculture, not impair it.

IMPLICATIONS OF THE TASK FORCE REPORTS

The individual task force reports which are found in the second section of this document suggest actions which can be taken to make the family farm more important as a pillar of California agriculture. Each one deals with a specific problem area. Considered together as a whole, however, they carry signficant implications for State policy. These include:

1. Opportunities deemed not attractive enough to be "viable" for some may be quite acceptable to others. That is the essence of the free enterprise system. Small farm success, therefore, needs to be evaluated according to what the farmer intends for his farm to contribute toward the family livelihood. In many cases it is not expected that the farm should be the sole source of income. Given the widespread practice of combining farm and nonfarm income to achieve an adequate family standard of living, "viability" should not be defined so simplistically that it includes only such farms as alone and of themselves provide the entire family support. In fact, small farms may be valuable contributors to stable rural employment by providing an income supplement to wage or nonfarm employment which is seasonal, irregular, or poorly paid. Also part-time farming is one of the few means by which some families can get started in agriculture. The farmer ultimately is the best judge of the viability of his own farm.

   This implies that a policy encouraging family farms should be linked to other policies promoting rural employment and economic development. It also implies that the farmer himself is probably the best judge of whether his farm is viable according to his needs. This broader perspective on the role of the small farm in the rural economy raises the question of how appropriate it is for government to assume unilateral responsibility for determining whether or not farms are "viable" at any given size. If current or aspiring farmers want to farm less than 320 acres, for example, on what basis shall government decide that such an enterprise is not "viable" for them?

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[1] See the report of the Finance Task Force and its case study on Cooperativa Central. The Training Task Force also addresses the issue of assisting low income persons into farming.

2. It is possible and practical to enhance the competitiveness of the family farm. Public policy has played a major role in reducing its competitiveness, and public policy can be used to increase it. Although some new resources and programs are needed, an effective small-farm policy will emphasize redirection of existing resources toward the family farmer. It will entail improved management of current programs, making a number of modest but important related changes at many different points in the system serving agriculture.

3. Successful family farms are modern and sophisticated, and so too must be the skills of the farmer. Family farming is no haven for the slothful and unskilled, and it is in no sense a return to yesterday. Any policy that seeks to encourage family farms must take note of the human resource requirements, providing for farmer development through training and information activities. Most of the task forces found that family farmers are not now receiving important information they need.

4. Marketing is at present the single most limiting constraint on the operators of small farms. Many farmers could grow certain crops which they do not, simply because markets for small producers are particularly limited, uncertain, or unknown. Vegetables, which can be profitably raised in small volumes but tend to be contracted in large volumes, are a case in point. Many State rules and regulations governing the marketing system ignore the needs of relatively small producers. Most importantly, the marketing system does not reward the family farmer for what he can do most competitively, which is to provide the market with a product of particularly high quality. The State has much to do with the structure and operation of the marketing system, and it can be helpful in making a more tenable place for the small farmer in it.

5. An expansion in the number of family farms means that eventually the percentage of irrigated farmland devoted to small farms also must expand, for the total amount of water and land is limited. A small farm policy implies a public interest in ensuring that family farmers will have access to adequate land and water resources. Federal reclamation policy addresses this need, as does the Natural Resources Task Force recommendation of a land purchase fund. A major question today is how the State of California should live and work with national land and water policies, and the notion is inescapable that there should be as much cooperation as possible between State and Federal government.

6. There is no one best way to farm; agricultural practices always are developed to meet specific conditions. A policy to promote the family farm implies that, over time, it will be necessary to evolve production and marketing systems that will reinforce the competitive position of the smaller farm unit. Through the University system, the taxpayer dollar already supports what many feel to be the best agricultural research and extension

capability in the nation. Its ingenuity in helping shape an agriculture well adapted to large farms bespeaks ample talent that could and should now be turned to creating an equally sophisticated agriculture adapted to family farms. By way of example, this might mean development of smaller and more versatile farm equipment, cropping systems permitting practical diversification on smaller acreages, and innovations in delivering extension services to larger numbers of family farmers.

7. Family farmers, who are a majority of all California farmers, need to have more voice in developing programs and regulations that affect them. That is why the Marketing Task Force, for example, suggests establishment of an unpaid board composed only of family farmers to review marketing rules and regulations for unnecessary bias against smaller producers.

GENERAL POLICY RECOMMENDATIONS

While the task forces were concerned primarily with matters specific to their assigned areas of concern, they also developed some joint recommendations in respect to issues of general policy pertinent to all the task forces. These consensus recommendations are as follows:

1. The State should take an active role in maintaining the competitive position of the family farmer and in facilitating the entry of new farmers. All agricultural programs initiated or funded by the State should be directed by the Governor and the Legislature to give high priority to serving the needs of the family farmer.

2. The State should discourage any concentration of economic control over agricultural resources and markets that diminishes the competitive position of the family farmer and impedes the entry of new farmers. Federal tax law is a powerful factor encouraging such concentration, but it is beyond the reach of the State. However, some major agricultural states have enacted laws seeking to reduce these negative effects through limiting ownership or investment in agriculture by certain entities such as foreign investors, investor syndicates, or conglomerates not having agriculture as their principal business. Other states are considering such laws. California should investigate this approach for its own possible use.

3. A family farm policy should be part of a more general commitment to developing strong rural communities. Family farms and the communities to which they are economically, socially, and politically linked ultimately must be considered together. A family farm policy should be conceived of as one part of a general rural development policy. It is recommended that the State of California begin by doing the following:

a. Establish rural oversight committees in the houses of the legislature, or perhaps set up a joint committee. Rural problems are big enough, complex enough, and special enough to merit this specific oversight. The status of family farms should be of as much concern to such rural oversight committees as it is to the more narrowly mandated committees dealing with agriculture.

b. Establish in the executive branch a capacity for identifying and analyzing rural and agricultural issues. The Governor's office should take the responsibility for establishing this capability and funding staff experienced and trained in matters of agriculture and rural development. One mandate of such a unit should be to review and report annually on the status of the family farm in California.

c. Improve coordination of State programs serving rural areas, and establish closer working relationships with federal programs. Improved collaboration between existing programs could do much to enhance the viability of small farms and to help open farming to new entrants. While there already are some noteworthy examples of effective joint action, so far too few efforts have been made to link resources in cooperation.

4. The State should charter a nonprofit corporation to encourage and assist local rural development activities, including the formation of family farms. This Corporation will seek to increase the capacity of rural people to solve their own local problems of unemployment and economic stagnation by investing in their ideas. This approach recognizes that a democracy should continually encourage its citizens to take individual and collective responsiblity for their own lives. It also recognizes that it is a responsibility of government to maintain adequate opportunities for them to do so. The corporation will help create those opportunities, and a major component of its program will be the creation and reinforcement of family farms. Its method will be to provide resources to viable employment creation and economic development activities initiated and controlled by community groups, both private and public. The objective is to facilitate the mobilization of rural citizens in devising locally appropriate solutions to their problems. This emphasis on galvanizing community self-help activity recognizes that current government programs tend to be too isolated, too inaccessible, too rigid, too narrowly focused, or too thinly stretched to be effective in many rural areas. Widespread rural development can occur only when there is far more varied and vital local involvement. Therefore, a major goal of the Corporation must be more vigorously active rural communities.

In order to obtain effective rural development projects, the Corporation must be able to supplement local efforts with essential assistance and resources that local people are unable to provide for themselves. This approach uses outside resources to remove bottlenecks and roadblocks to more productive local action. The Corporation must be able to provide the following kinds of assistance as needed:

- financial assistance (grants, loans, guarantees);
- project feasibility studies;
- organizational assistance;
- leadership development;
- technical assistance;
- management and skill training;
- problem-centered research;
- production of information and training materials;
- liaison between local organizations and public agencies.

It is recommended that the Corporation be organized and established as follows:

1. The Legislature should charter the Corporation as a State-supported nonprofit corporation. This type of organization provides adequate accountability while allowing for the operational flexibility essential to the task but difficult for units of government to achieve. Upon passage of necessary legislation, the Executive branch should establish an office or other responsible unit to assist administratively in launching the Corporation.

2. The Corporation should receive its base funding from the State through bonding, allocation from the General Fund, or both. It should expand on this base through seeking other state, federal, and private-sector funding as appropriate to its purpose of collecting and packaging a wide variety of resources to meet specific local needs.

3. Powers of appointment to the Corporation board should be shared between the leadership of the legislative and executive branches.

4. The Corporation should be empowered to respond to any private or public sector organization according to the merits of projects presented. It should be able to provide services either by contract or from its own staff.

   The Corporation should be empowered and mandated to promote the formation and prosperity of family farms. If such a Corporation is in fact established, certain activities recommended independently under each task force report may be placed under its responsibility. They include:

   - financial assistance to farmers and production cooperatives, especially through provision of guarantees or front-end equity which will make other lenders accessible (see Finance Task Force report);

- technical and financial assistance to marketing cooperatives and direct marketing activities (see Marketing Task Force report);
- a land-purchase fund, providing access for family farmers to appropriate farmlands on affordable terms (see Natural Resources Task Force report);
- the monitoring of agricultural research carried out with public funds, and reporting on this research and its potential impact on rural people (see Technology Task Force report);
- technical and financial assistance to training programs, including integration of training and financial resources, training of trainers, leadership development, and development of improved software and hardware for farmer training programs (see Training Task Force report);
- technical assistance and seed money for improvement of rural community facilities (see Community Services Task Force report).

THE VIEW FROM THE FAMILY FARM

To this point the discussion has centered on policy and program structure, which are of interest primarily to government officials. These things mean little to the farmer; he cares less about where a particular program fits into the overall structure of government than he does about how that program will affect his business and his life. What, then, will be the effect on the farm family if the recommendations of this project are implemented?

Most important, it will be easier for the aspiring farmer to establish himself in farming. He will have the opportunity to enter supervised credit programs in which financing is linked to training and technical assistance. This is particularly important for individuals who have no previous training or experience in managing a farm. Much of the structured training will be available through local community colleges, adult schools, or nonprofit organizations such as community development corporations. After a period under a supervised credit program, the farmer will have established the track record he needs to obtain financing through regular commercial channels.

The aspiring family farmer will find it easier to locate appropriate land. In addition to the open market and "excess lands" that may be sold under provisions of reclamation law, he may acquire land through a land-purchase fund that develops and finances family-size land parcels. The farmer will find more assistance in obtaining start up and operating capital, including flexible payment schedules geared to his actual income during the first few years. If the farmer chooses to work through a production cooperative, he will have access to these same financing sources, either individually or through the cooperative. Some of these services may be available through a

State-sponsored rural development corporation whose purpose is to help reestablish small farms and other business in rural communities. The principal purpose of such an organization would be to help rural residents revitalize their communities with a minimum of "red tape."

In operating his farm, the small farmer will find the university to be a more valuable resource. Its research activities will focus on developing innovations to improve the productivity and profitability of his family size operation. He will be able to call upon Extension Service farm advisors to help him establish sound systems and practices on his farm as a whole, as well as to deal with technical problems pertaining to specific crops.

The small farmer will have more options in marketing his produce. For example, he will have the opportunity to grow and pack a more mature, higher quality product to be sold in California at a premium price. This will make a place in the market for him to produce what the smaller farmer can do best, and it will provide the consumer with the fresh, ripe, high quality product so many now seek. Most of the small farmer's produce may be marketed through cooperatives of which he is a member. The Extension Service and other agencies will be helpful in organizing and managing cooperatives of various types. Through the cooperative, he will be able to obtain markets for profitable crops that he could not raise if he had to market on his own. This will enable him to diversify his farm for greater financial security. His interests in the marketplace will be defended by a family farmer review board examining proposed regulations governing marketing for unnecessary discrimination against small producers. For at least part of his crop, he will have access to direct marketing outlets such as certified farmers' markets, where he can realize most of the retail price.

Overall, the farmer will find the State has committed itself to work with him to build a California agriculture that is people-centered as well as production-centered. The ability of the family farmer to compete within the agricultural system will be enhanced, and this in turn will enhance his opportunities for self-reliance. The farmer will find that as he and his family farmer neighbors become more competitive, his community also will improve. Along with new business growth, it will offer a wider variety of services, employment opportunities, and social activities.

Most of the mechanisms suggested by the task forces are relatively simple. They should be, for no citizen should be required to wade through miles of red tape when the intent of a government program is to help solve problems. They can be instituted without major disruptions in government, or in the rich diversity of farm types and sizes in California. Most will not require substantial new resources, because they are designed to use existing programs more effectively.

It seems clear that rural citizens and government working together can accomplish much to make the small farm not only more viable, but also more central in California agriculture and rural society. There would be substantial benefits from doing so, and the costs would be moderate. The family farm which fosters economic progress, hard work, self-reliance, and a strong commitment to family has been a vital part of America's heritage. It should continue to be an important element of our society, today and in the future.

II

Reports of the Task Forces of the Small Farm Viability Project

PROJECT PARTICIPANTS

Small Farm Viability Project

MARKETING TASK FORCE

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MARKETING TASK FORCE

FINAL REPORT

Small Farm Viability Project

November 1977

ABSTRACT

MARKETING TASK FORCE

Small farmers have special needs of the marketing system, and they are more vulnerable than large farmers to imperfections within it. Also, a large portion of them raise perishable crops that are subject to relatively high risk and price fluctuations. This uncertainty is exacerbated by the reluctance of the marketing system to deal in small volumes. Consequently, small producers tend to face higher per unit marketing costs and lower returns.

Three approaches currently are being taken toward alleviating small farmer marketing problems. One seeks to improve the established marketing system, making it more accessible to small farmers and more responsive to their requirements. Another pools small farmer produce through cooperatives, forming larger volumes with which to deal on the market. Still another approach bypasses the traditional marketing system and fosters direct sales by farmers to consumers. None of these methods excludes the others, and each should be expanded to create more marketing options for family farmers. Problems and recommendations identified for each include:

1. IMPROVEMENTS IN THE EXISTING SYSTEM:

    a. Small farmers are not sufficiently aware of existing marketing outlets available to them. The Extension Service should establish an information service to help them identify brokers who can handle their produce.

    b. Family farmers are not rewarded in the marketplace for what they can do most competitively, which is to produce an exceptionally high quality product. There is growing consumer demand for such a product. The State should establish and promote a "supergrade" of fresh produce for intrastate marketing. This new grade will certify higher standards of maturity and flavor, and it will bring a premium price.

    c. Many state regulations governing marketing unnecessarily discriminate against small producers, who are inadequately represented in the drafting and review of such regulations. The Department of Food and Agriculture should routinely investigate the expected effects of such regulations on farms of different sizes, not promulgating rules which needlessly discriminate against small producers. A review board comprised of family farmers should oversee this process.

2. EXTENSION AND REINFORCEMENT OF COOPERATIVES:

    a. The existing infrastructure of cooperatives is not adequate to meet small farmer needs. In some places there are no cooperative

facilities locally available, and in other cases existing cooperatives are unresponsive to small producers. The State should actively facilitate the establishment and improvement of cooperatives to serve small farmers.

b. Successful cooperatives demand exceptional skill and attention during their formative years, and finding a resource pool of technical assistance willing to work with small farmer cooperatives has proved to be a real obstacle. The State should establish a technical assistance service for small farmer coops, made up largely of persons currently working with small farmer marketing cooperatives. Working part time during the off-season, these persons could assist new and troubled cooperatives.

c. Small farmer cooperatives need a continuing educational program for board, staff, and membership. The University of California Cooperative Extension should implement such a program.

3. DEVELOPMENT OF ALTERNATIVE MARKETS:

a. There is an increasing spread between the prices farmers receive and the prices paid by consumers in retail stores. Much of this increased price spread comes from a growing marketing bill. The State should encourage direct marketing arrangements to enable farmers to capture a larger portion of the retail price. To do this, it should establish an interdepartmental direct marketing task force to set up small farmer direct marketing activities, particularly certified farmers' markets.

b. A direct marketing system will require a flow of adequate research and information to do its job, and therefore the University of California should be encouraged to do research in subjects that can improve direct marketing programs.

FINAL REPORT

MARKETING TASK FORCE

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I. INTRODUCTION

This task force report addresses itself to the question: If small farmers are in the public interest, how can their marketing problems best be met? The findings contained in the report draw heavily on the expertise of the task force authors. Three of them were full-time small farmers, all having substantial experience in the marketing of produce. One of these farmers was also a member of a State marketing board. Another taught classes in agricultural marketing at Fresno State University. The third farmer member had a Master of Business Administration degree and formerly worked in the marketing field. One author was an administrator in a rural development organization active in cooperative marketing by small farmers, and two others were from State agencies concerned with agricultural marketing, where both were closely identified with the new State direct marketing project. One of these individuals also taught agricultural economics and marketing at the University of California at Davis. In addition to task force members, two research assistants were made available through special funding from the University of California and have contributed substantially to this report.

The task force is aware that not all family farmer marketing problems have been addressed in this report. The group felt that it should direct its efforts toward the broader marketing issues pertaining especially to small farmers, and to accomplish this goal the task force has had to adopt certain limitations. The first constraint was to limit discussion to the fresh fruit and vegetable market, in which small producers are especially active. The study addresses itself to the small farmer's problems of selling in small lots and discovering alternative market outlets. It also concerns itself with current marketing and health regulations and their effects on small farmers.

Because pertinent hard data regarding small-farmer marketing is scarce, the task force, as mentioned, has had to base a number of its points on the experience and judgment of its members. In addition, however, it has undertaken two field surveys to produce new data. In one of these, more than 70 small farmers producing fruit and vegetable crops, and representing different parts of the State, were interviewed by means of a detailed questionnaire. The second survey concerned the availability of traditional market outlets to small farmers. A questionnaire was mailed to every first handler in Fresno County identified as buying fresh produce from farmers. Summaries of the results of these surveys are attached as Appendices A and B.

II. SMALL FARMER MARKETING NEEDS

Any farmer needs to sell his produce in an effective and efficient market. Such a market would provide the following:

1. Access

Sufficient market access means not only a place to sell the farmer's product, but also a range of alternative means of selling it. The farmer needs to be able to shop around and utilize the outlets most compatible with his desires, thus encouraging competition among buyers and creating a true marketplace. Without this, farmers lose any ability to influence through their bargaining the market and the way it operates. They need access to market information, such as price and expected production levels. Finally, they need information about how the market is structured and how they can make use of it.

2. Compensation

Farmers need a return on their crop that is both fair and prompt. A good market should return to the farmer a reasonable return on his labor and investments within prevailing demand and supply conditions. Prompt payment for produce is necessary for farmers having limited operating capital.

3. Options

Farmers need to be able to respond to various conditions with a certain amount of flexibility. For example, they should be able to put crops into storage, choose between fresh and processing markets, or make other choices to deal with difficult marketing situations.

4. Efficiency

Farmers need markets that will take as much of their produce as possible and distribute it economically and with dispatch to the right people at the right time, in the form they want and can use.

5. Effectiveness

The market must satisfy the tastes of the consumer. If the marketing process loses, distorts, or destroys the quality of the farmer's product so that consumer demand flags, the farmer loses.

Current statistics seem to point out that small farmers probably are more vulnerable than large farmers to imperfections in the marketing system, at least at certain critical points. This means they have special needs from the system. Subsequent sections deal more specifically with these needs.

III. THE MARKETING SITUATION FOR THE SMALL GROWER TODAY

In an industry tending toward large production units, small producers must confront many problems. To enter into farming, the majority are limited initially to production activities which do not require significant capital, but instead rely heavily on labor resources. For this reason, many have chosen to grow fruits and vegetables for the fresh market.

The fresh fruit and vegetable market makes it possible for the small producer to receive a higher per unit return on his product. In this market, however, the producer must undertake more risk in his operation. The high perishability of his crop and the considerable price fluctuations create a high degree of risk. Therefore, marketing reliability is important to his success. At the same time, however, the small farmer must face the traditional market's reluctance to deal with him because of his small volume. This small volume, which places him at a disadvantage regarding bargaining power and marketing access, forces the small grower to go to wherever he is able to find a market, often resulting in higher marketing costs and lower prices to him. This marketing dilemma is shared by many small growers in California.

Three initiatives are currently under way to alleviate some of the marketing problems of smaller farmers:

(1) attempts to improve existing procedures within the traditional marketing system;

(2) efforts to develop cooperatives designed to increase the participants' bargaining power in the market place through collective action; and

(3) activities designed to bypass the traditional marketing system by establishing more direct contact between farmers and consumers.

The traditional marketing system has expanded in response to the growth of the agricultural sector. With this development has come a complex set of laws and regulations for almost all phases of produce marketing. State and federal marketing orders, along with state standardization regulations, govern most of the marketing channels. These regulations have imposed hardships on smaller growers in two ways:

(1) marketing orders (when dominated by larger growers) are frequently insensitive towards smaller growers; and

(2) marketing regulations and restrictions place excessive costs on the small grower who tries to market locally.

Each of these hardships is now discussed in turn and is the subject of subsequent recommendations.

Whereas the larger grower may sell his entire crop to distant markets, the small grower may sell in more local markets. However, standards set by marketing orders and other regulations require essentially the same packing procedures (i.e., sizing, grading, cosmetic controls, and containers) for produce being shipped two miles as are required for produce being shipped across the nation. Because of the exigencies of a national marketing system, freshness for local consumers often must be sacrificed for measures designed to delay maturation, reduce spoilage, and extend shelf life. The packing procedures required by law also result in much higher costs for the farmer trying to sell to local markets. While the task force has no argument with regulations designed to accommodate the long-distance buyer who is purchasing "sight unseen," we do regard a lack of any flexibility as responsible for excessive costs for those farmers who are marketing locally--the majority of them small farmers. In this way the regulations, over which the State has much control, create special problems for the small farmer.

Consumers are also questioning the rationale behind certain marketing regulations. In addition to objecting to the increased cost to the consumer from excessive packaging, they have expressed dissatisfaction with the quality, maturity and freshness of produce available in retail stores. Smaller farmers have been particularly responsive to this new initiative among consumers by supporting farm-retail and U-pick operations, rent-a-tree-agreements, farmer's markets, roadside stands, etc.

While critics are not calling for a dismantling of the entire marketing structure, they ask that some of the current regulations be reevaluated. One debate is over requirements which dictate that produce must be marketed in uniform sizes, packed in specific types of containers. Perhaps these regulations make sense when marketing nationally, in order to build in a regularity and continuity of expectations between brokers, wholesalers, and retailers, but there is good reason to ask whether marketing within Califoria must conform to a system of specifications designed for the entire country.

Cooperatives are one vehicle through which small growers can gain access to markets. Coops have the ability to make use of the traditional marketing system while also using such alternatives as direct marketing. How much a marketing cooperative benefits the growers depends upon the services which the coop provides them. This, in turn, depends on the number of members in the association and the amount of capital they have invested in it. Cooperatives can range in size from an association providing one or two services for a few farmers who have invested a minimal amount of capital to a large, multi-million-dollar association with thousands of members to whom it provides a full range of production, marketing and education services. In fresh-produce marketing, the benefits received also depend on the size of the member's farming operation. For large growers who are capable of developing their own specialized markets and who benefit from the economies of scale which can exist in the distribution of their products, there is little reason to join a coop. However, for the small grower who, by himself, does not have the size to develop these capabilities, associating with a cooperative can provide the opportunity to participate in the benefits of specialized markets and economies of scale.

Organizations such as marketing cooperatives expand the small farmer's alternatives by opening up channels which are not otherwise available due to the small volume of the individual grower. In selling together, small farmers can market a greater volume, thereby gaining greater bargaining power and avoiding the inherent inflexibility of the small producer who is often unable to respond to prevailing market preferences and prices. Cooperative members can also reduce their marketing costs by eliminating much duplication of effort in packing, selling and transporting their goods. Also, marketing costs can be reduced through cooperation by providing individual small growers with ways of sharing fixed costs, such as sharing cooler space.

Specifically, cooperative marketing can benefit the small farmer in the areas of market and brand development, purchasing programs, coordination among programs, educational programs, and providing the farmer a share of the profits occurring in the food distribution sector.

As a result of the traditional marketing system's inability to accommodate certain needs of small-volume producers, increasing numbers of farmers have become involved in more direct forms of marketing to consumers. Farmers have looked at these new outlets both as a means to sell occasional excess products which could not be marketed through the traditional system and as a mechanism through which to market on a regular basis. Although they are presently only in initial stages of development and are not likely to supplant much of the traditional system, new forms of direct marketing nevertheless appear to hold some promise for serving smaller farmers while satisfying the consumers' demands for fresher, riper, tastier and more varied farm products.

Direct marketing activities are diverse. They include arrangements whereby consumers are encouraged to come directly onto the producer's farm, using farm trails, U-pick operations, and rent-a-tree agreements. Other forms of direct marketing meet the consumer part way. Farmers' markets and roadside produce stands are the prime examples. With new regulations recently promulgated by the Department of Food and Agriculture to permit the establishment of Certified Farmers' Markets, farmers now can sell products they grow through both these outlets with exemption from certain size, standard pack, container, and marketing requirements. As a result, certain marketing costs which have typically served to discourage the smaller producers from selling in the fresh produce markets have been eliminated. Currently, there are initiatives to create new certified farmers' markets in at least 18 different locations throughout the state.

Finally, some farmers are marketing more directly by going to the retail outlet itself. Many consumers have demonstrated a preference for new forms of purchasing their food and are forming cooperatives. Over 300 local food cooperatives now exist throughout the state, and their number is increasing. Consumer food coops are also beginning to create linkages among themselves in regional marketing arrangements. A few farmers and food cooperative stores have entered into direct marketing agreements. Farmers have also traditionally formed such agreements with smaller retail store chains and individual stores. Another current initiative, which is similar in that the farmer goes to the consumer, is an arrangement wherein state institutions (e.g., prisons and hospitals) become regular markets for small-volume producers. A pilot project in a Southern California prison has been jointly sponsored during the past year by the Departments of Consumer Affairs, Food and Agriculture, and General Services.

IV. RECOMMENDATIONS

The task force suggests action in three areas to alleviate some of the marketing problems of small farmers:

(1) improvements in the existing system,
(2) extension and reinforcement of cooperatives, and
(3) development of alternative markets.

We will discuss problems and make specific recommendations for each of these.

IMPROVEMENTS IN THE EXISTING SYSTEM

Problem:

The marketing of fresh produce is dominated by one central theme--a pervading sense of urgency because of the perishability of the product. The current methods of purchasing from farmers by wholesalers as well as by large supermarket chains reveal a high preference for buying in large volumes. Certain markets simply are closed to some producers by virtue of an integrated set of relationships among the supermarket chain and its own carriers, processors, packers, and producers.

The Task Force has found that small farmers are not fully aware of traditional marketing opportunities that are available to them. Our research has shown that at least in Fresno County there are more brokers handling small accounts than generally has been recognized. But, while there are brokers willing to consolidate and handle small lots, farmers often do not have adequate information about who they are and the services they offer. This means the small farmer is brokering his produce with less adequate market information than is the large farmer. Given the limited time the farmer has available to search out the full range of market opportunities, it is not surprising that he often sells his crop on the basis of partial information.

Recommendation:

> The University of California Cooperative Extension Service should establish a broker information and referral service so that farmers can obtain information regarding brokers willing to handle small accounts. Such information should include terms of payment and advances.

Problem:

Current grading criteria do not adequately reflect flavor, maturity, and nutritional value. This affects the small farmer who is especially competitive in producing crops higher in edible standards because of his ability to manage and control his crop more closely. Currently, however, there is too little incentive in the market to reward him for producing better food as opposed to prettier food. For example, the traditional fresh produce market system will not accommodate the marketing of "ripe and ready" produce. Instead of receiving the premium price consumers will pay for such produce because of its higher sugar content and better flavor, the producer is usually penalized for bringing ripe produce to the wholesale market.

Recommendations:

1. A "Supergrade" of fresh produce should be established for intra-state marketing. This new grade should be based on higher standards of maturity, flavor, and nutrition than those applied to present grades. The question of how to apply essential cosmetic and sizing criteria to this new grade should be studied carefully to determine consumer preferences and the ultimate effects on the small farmer and the industry. This new grade, which should command a premium price, will be certification to the consumer that he is purchasing a high quality product that was ripened to greater maturity in the field.

2. The establishment and vigorous promotion of the new "Supergrade" should be organized and supported by the State. This will entail an extensive consumer education program, conducted through the public media, to inform the public about the new grade and what it promises to the consumer. Other activities may be necessary to help support the producer in adapting his production and marketing to this grade pattern. This expenditure by the State is justifiable not only for its effects on the small farmer, but even more importantly for the public benefits it bestows in the form of higher quality food and nutrition.

3. The University of California Cooperative Extension service should be mandated to provide technical assistance and information to assist small producers in modifying their operations so as to be able to take the best advantage of this new grade. Where possible, these services should be provided in conjunction with cooperatives and other farmer organizations. Many small farmers will have to master new production and handling techniques if they are to place a sufficiently high percentage of their crop in the new premium quality grade.

Problem:

Allegations have been presented that current marketing and other regulations appear to serve large producers while disregarding small producers. This applies not only to the definition of standards which produce shall meet, but also to the benefits of research or market promotion. In cases wherein marketing orders determine the allocation of rights to producers to market under particularly profitable classifications, the effects on large and small producers are vitally important. While federal marketing regulations may be particularly difficult to affect at this time, the State can and should review its own regulations for bias against the smaller producers.

Recommendations:

1. The Bureau of Marketing in the Department of Food and Agriculture should be required to file impact statements describing projected distributional effects by size of farm for all marketing regulations. This should be started by a complete review of all standing market orders and would be applicable to all proposed regulations in the future. The Director of the Department should refuse to promulgate regulations and marketing orders found to be discriminatory to small farmers in the absence of any compelling public benefit.

2. The State should establish a Review Board to advise the Director of the Department of Food and Agriculture on the impact of marketing orders and other regulations on smaller producers. This board would oversee the impact statement process to ensure that it is implemented thoroughly and in good faith and would review all findings reached through it. In addition, the Board should be able to recommend pertinent legislation. Board members should be non-paid representatives elected by small farmers (as defined in the Small Farm Viability Planning Project).

3. Unnecessary restrictiveness in Marketing Orders and other State regulations should be eliminated.

EXTENSION AND REINFORCEMENT OF COOPERATIVES

Problem:

One of the most promising methods of overcoming the problem faced by the farmer trying to market small volumes is the marketing cooperative. Through a cooperative, small volumes of produce can be pooled and brand names promoted to develop more bargaining power in the market place, thereby developing a stable and consistent outlet. In contrast to traditional marketing firms, cooperatives are profit-sharing organizations. The primary function of a coop is service to its members. Thus, profits in the investor-owned-firm sense do not exist. This basic principle assures the grower of receiving a larger portion of his sale price. Cooperatives are, therefore, a vehicle through which small farmers can improve their marketing security, stability, and returns. Even though a number of marketing coops already exist, many of them are geared to the larger farmer's interest and do not meet the needs of smaller growers.

Recommendation:

The State should take active responsibility for encouraging the establishment and success of cooperatives to serve the marketing needs of small farmers. Loan guarantees for new coops could be especially useful.

Problem:

Especially during their start-up years, small farmers find it difficult to develop cooperatives on their own because they lack the necessary organizational and managerial skills and experience. Those who may possess such skills have to devote most of their energies to production on their farm. Cooperatives demand exceptional skill and attention during their formative years. A lack of available technical assistance is a tangible impediment to the establishment of new marketing cooperatives. Small farmers have specialized needs for such assistance. For example, in many cases there may be the need for bi-lingual instruction. Finding a resource pool of available technical advisors poses a real obstacle. In general, people already working for the State or in the traditional marketing system do not have this specialized expertise.

Recommendations:

1. A technical assistance group with expertise in the area of marketing cooperatives should be established. The State should play a key role in setting up the group and coordinating its efforts.
2. The technical assistance group should be made up of people currently working with small farmer marketing cooperatives.
3. In the off-season, the staffs of these coops are rarely used to their full capacity, so during that time they could be retained to work for the technical assistance group, thereby allowing them to use their skills at other cooperatives.

Problem:

Cooperatives are complex enterprises requiring more than just technical help. Successful coops must also have a membership, staff, and board of directors who are well educated in their various responsibilities to the coop. This can only be learned through an educational program. Since many new coops have very limited resources, it is extremely difficult for them to allocate resources for educational programs. Backup assistance in this area is needed. The obvious place for such assistance is the University of California Cooperative Extension Service.

Recommendations:

The University of California Cooperative Extension Service should design and implement cooperative education programs. These programs should be designed directly for the membership, management, and boards of directors of coops on basic coop education as well as technical training. The programs should be a year-round supplement to the technical assistance group. Two possible formats for delivering this material are:

(1) A roving program given on location at the various coops.
(2) Mini-courses given at the universities or local colleges.

DEVELOPMENT OF ALTERNATIVE MARKETS

Problem:

There is an increasing spread between the prices farmers receive and the prices paid by consumers in retail stores. In 1974, the farm-retail price spread increased by 20%. Gross returns to farmers for market basket foods averaged $721 out of a total of $1,824 in the first quarter of 1975, down 4.5% from the previous quarter and down 8% from a year earlier. Farmers now only receive about 33 cents from each retail dollar spent on fresh fruits and vegetables. This follows a 20 year trend from 1952 to 1972, during which farmers saw their production costs increase 122%, while the prices received for their products increased only 6%.

Much of this increased price spread has developed from a growing marketing bill. The marketing bill is the cost of processing and distributing farm foods. Figures 1 and 2 illustrate the marketing bill and recent changes in the farm-retail spread.

The interest in reestablishing direct marketing has come about as a reaction by both farmers and consumers caught in the crunch of low farm prices and high retail prices. The fundamental theory behind direct marketing is to reduce processing and number of times a product changes hands, thereby reducing the price spread. The farmer who takes advantage of this type of marketing is able to capture a larger portion of the consumer dollar. These kinds of opportunities can be accelerated by a strong direct marketing program in California.

Recommendations:

An interdepartmental direct marketing task force should be established to aggressively establish programs for direct marketing for small farmers. This task force should:

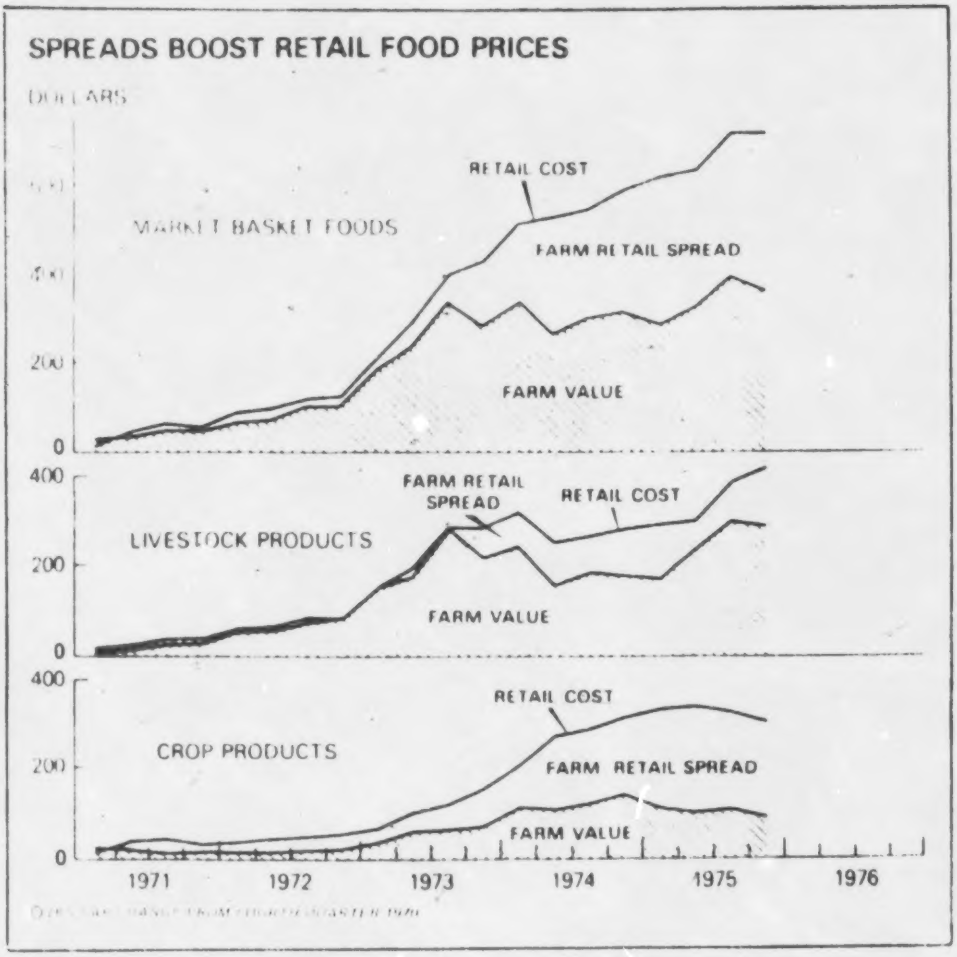
(1) Include the Departments of Food and Agriculture, Health, Employment Development, and other necessary agencies.

(2) Recommend appropriate enabling legislation and administrative structures for the ongoing operations of a system of certified farmer's markets.

(3) Establish an independent association representing the constituency of farmers involved in direct marketing in order to:

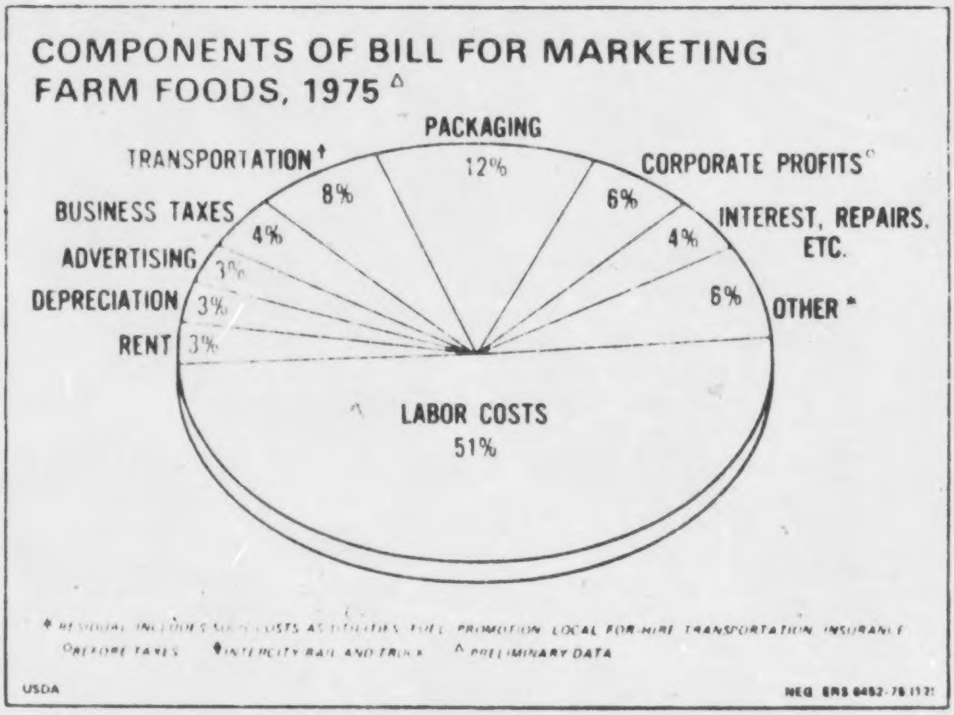
- a. Serve as the communication vehicle between farmers and consumers, Federal or State agencies, universities, and other institutional sources of direct marketing information.
- b. Provide farmers, consumers, and market managers with training and educational programs for helping them set up direct markets.

FIGURE 1



Source: "Developments in Marketing Spreads for Agriculture Products in 1975," Economic Research Service, United States Department of Agriculture, March 1976.

FIGURE 2



COMPONENTS OF BILL FOR MARKETING FARM FOODS, 1975 Δ

* RESIDUAL INCLUDES SUCH COSTS AS UTILITIES, FUEL, PROMOTION, LOCAL FOR-HIRE TRANSPORTATION, INSURANCE

° BEFORE TAXES † INTERCITY RAIL AND TRUCK Δ PRELIMINARY DATA

USDA NEG. ERS 8452-75 (12)

Source: "Developments in Marketing Spreads for Agriculture Products in 1975," Economic Research Service, United States Department of Agriculture, March 1976.

Problem:

Both the association and task force have need of research and information to do their job. The people with facilities and expertise to perform this service are primarily within the University system. Therefore:

Recommendation:

> The University of California should be encouraged to do research in economics, marketing, social sciences, and other fields that can be used to help form direct marketing policy.

APPENDIX A

SUMMARY:

THE AVAILABILITY OF PACKING AND SALES FACILITIES FOR THE SMALL GROWER

By Dwight D. Minami and John W. Hagen

Fresno County produce packers, shippers, and sales firms were surveyed in the spring of 1977. Of the 193 questionnaires sent out to these firms, 88 were returned and used as the basis for the analysis of this study.

The packer-shipper sales firms were asked to relate the size of the acreage, the volume of produce packed, and the dollar value of the produce packed or sold for the three smallest grower accounts they had in 1976.

The average of the three smallest growers of these packing firms was 63.6 acres. However, these growers ranged in size from 0.5 acres to 1,200 acres. The average small grower had 14,964 lugs of produce handled by the 88 marketing firms for an average value of $163,648. The volume of the three smallest growers ranged from 44 to 450,000 lugs. The value of this produce ranged from $264 to $2,250,000. It is apparent that while the average size of small grower is fairly large, there is a wide range in size of small growers.

Exactly one-half of the surveyed firms indicated they would welcome small grower accounts. There are some practices, however, that the smaller grower could do to be more welcomed at the packer-shipper level. The smaller grower could minimize the number of varieties he grows, he could coordinate closely with the packer, he could make an effort to fit his produce in with the packing schedule of the packing facility, and he could use cultural practices which generally yield high quality.

Packer-shippers often view the smaller grower negatively. The surveyed firms felt that the main problems associated with handling small grower accounts are: the difficulty in scheduling small lots through the packing shed; the added costs of handling small lots; the difficulty in obtaining adequate supplies; and the differences in business objectives between the smaller grower and the operation of the packing shed.

There was an almost equal number of part-time and full-time growers who marketed their produce through the 88 surveyed firms. These packer-shippers were fairly well dispersed throughout the county.

It appears that small growers probably do encounter some difficulty in finding a marketing channel. A marketing outlet, however, appears to be available for the smaller grower in Fresno County if inquiry is made. While many large firms do not care to waste their time and resources on the smaller grower, several firms were found who specialize in packing and selling small lot quantities.

There are many large packing firms in Fresno County who pack produce for only three or four growers. Many of these growers are either part owners or relatives of the packing facility management.

However, several packing-shipping firms were found in each major shipping location (Firebaugh, Mendota, Fresno, Reedley and Sanger) who indicated they would pack and sell fruits and vegetables for smaller growers regardless of the volume.

APPENDIX B

Division of Agricultural Sciences
UNIVERSITY OF CALIFORNIA

RESULTS OF THE SMALL FARM SURVEY

Mark Gustafson, Bruce F. Hall,
E. Phillip LeVeen, and David Pelzer

California Agricultural Experiment Station
Giannini Foundation of Agricultural Economics
September 1977

RESULTS OF THE SMALL FARM SURVEY

by

Mark Gustafson, Bruce F. Hall, E. Phillip LeVeen, and David Pelzer

Introduction

The information below was obtained from a questionnaire administered by personal interview to 74 fruit and vegetable growers in California. They were asked a wide variety of questions about their farm operation. Production, marketing, and financing were the major focus of the study. The intention of the survey was to identify and describe the problems of the small farmer in California, and the fruit and vegetable sector was selected not only because it is important in California agriculture but also because the low acreage requirements of fruit and vegetable production create low barriers to entry relative to other types of farm operation.

There is no satisfactory definition of what constitutes a small farm. The most consistent way of identifying and analyzing the small farm would be to survey a random sample of all farms and then restrict the analysis to those farms which are deemed "small" by some criterion such as gross sales. This is a relatively expensive procedure, however, and the limited resources of this project dictated an alternative approach. Working from a list of farmers who had contacted the Direct Marketing Service in Sacramento, those who had less than 100 acres in production were identified; and a geographically diverse subset was approached by the interviewers. A total of 74 usuable questionnaires was obtained through this process.

The acreage criterion proved to be a very uncertain measure of size. Consequently, not all of the farms surveyed can be characterized as small, although there are no very large farms. The study group emerges finally as a group of small-to-medium-size family farms. It is more homogeneous than a random sample would be; there are fewer very small, marginal farm operations and no extremely large corporate farms. As such, it is perhaps representative of what the family farm is in the fruit and vegetable sector, and its problems are typical of the family farm in California.

That small farmers do have problems is indicated by the fact that 60 percent said that their operation did not provide them with an adequate return. It is difficult, however, to receive an absolutely clear picture about income since 47 percent of the interviewees earned money off the farm. The majority of farmers (60 percent) indicated a desire to increase their income on their farm operation, and 57 percent said that they would have to enlarge their farming operation in terms of land or production in order to survive in the future. As will be indicated in the text, the farm operations in our survey vary greatly in terms of acreage, income, facilities, and problems cited in the areas of production, marketing, and financing. Hence, it is difficult to make any further wide-sweeping

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comparisons about the farmers surveyed other than the fact of their great variance. However, it can be said, in general, that the average farmer interviewed works not so much for the income as for his love of farming as a life style.

General Description

Although the age of the farmers ranged from 21 to 77, the median age reported was 48 years--very close to the national average. The group median was 13 years of education and 12 years of farming experience (Table 1). Almost all the farmers own the land on which they farm, and 80 percent live on the land that they farm. The farmers reported that they began farming on anywhere from 1/10 of an acre to 1,000 acres and farmed as many as 20,000 acres; it is suspected, in the latter cases, the farmer at that time was hired and that the land belonged to someone else. At the time of the interview, the range of land farmed was from 1/2 acre to 150 acres--the average being around 29 acres. Of the respondents, 75 percent have the same size or larger acreage in comparison to when they began. The majority of farmers entered their profession either by joining a family operation that was already underway (28 pecent) or by purchasing a farm (41 percent). Only 18 percent began operations by renting any farmland.

TABLE 1

Typical Farmer Interviewed[a]
California, 1976

Age: 48 years

Education: 13 years

Farming experience: 12 years

Size of farm: 20 acres (owns, farms, and resides on land).

Farm workers: 4 members of immediate family (2 of whom work part time).

General feeling: Farming provides satisfactory quality of life; will remain in farming in future and would recommend it to his children.

[a] Entered farming either through family or by purchasing a farm.

Source: Based on median of responses to survey.

The majority of farmers felt that farming did not, by itself, provide them with an adequate return for their labor, and 57 percent felt that they would have to enlarge their farm to survive. However, the vast majority was convinced that it did provide them with a satisfactory quality of life. This is not to say that they were satisfied with their farm income, for almost half of the interviewees work in off-farm employment; in all, an average of 50 percent of the family's income was earned off the farm. For the majority of farmers, off-farm employment was necessary the year-round. Table 2 cites the average amount of on- and off-farm employment of the farmers interviewed.

TABLE 2

On-Farm and Off-Farm Employment
California, 1976

Employment	Amount
On-farm	
Average income received (percent)	50
Time worked per week (hours)	
Winter	17
Spring	40
Summer	45
Fall	30
Farm work activities (percent)	
Management	10
Supervisory	10
Physical labor	80
Off-farm	
Time worked per week (hours)	47
Time worked per season (percent)	
Winter	90
Spring	70
Summer	60
Fall	70
Off-farm activities (percent)	30

Most of the farmers did not hire out supervisory or management services but rather chose to perform these functions themselves. Almost all kept some records of certain aspects of their farming operations such as income and expenditures. To a lesser extent, they recorded cropping patterns, yields, and rates of chemical and irrigation application. On the other hand, the farmers often did hire labor (Tables 3 and 4), especially for harvest in the summer, as their average of four family members and two family workers was not always enough to handle the load.

Production Questions

The farmers grew a wide variety of crops as is shown in Table 5. Of the farmers, 44 percent were vegetable growers, and most of them rotated their crops. Because of the wide variety of operations, it would be difficult to present an average cropping mix. However, farmers gave market information on 132 crops, or 1.81 crops per farmer. Because of higher returns, 83 percent of these were grown for the fresh market.

Most farmers seemed to have an adequate irrigation system at their disposal. Most, for instance, thought that their water source was reliable and that their land was adequately drained.[1]

The breakdown of other facilities available is shown in Table 6. The majority of farmers did not have at their disposal premarketing facilities such as packing sheds, cooling facilities, or storage space for their crops. This situation sometimes aggravated their marketing problems, for they could not forestall their harvesting and marketing dates in the hope that market prices would rise in the near future. Only three percent of the farmers reported that they stored their unsold crops.

TABLE 3

Source of Labor of Respondents
California, 1976

Source of labor	Average number of workers	Salaried	Average man-months worked per year
Family	2	Yes[a]	4
Nonfamily	4	Yes	5

[a] 42 percent.

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[1] For more information on irrigation, see Table 9, infra, p. /.

TABLE 4

Harvest Labor, California, 1976

Source of labor	Percent
Family only	23
Family plus hired	57
Hired only	6
Custom harvested outside	9
Harvested by processor/buyer	5

TABLE 5

Income Received from Farm Operations
California, 1976

	Median	Mean
	dollars	
Gross sales	25,600	51,225
Net income (gross sales minus operating costs)	6,713	20,331
	number of farmers reporting production	
Crops grown		
Peaches	12	
Walnuts	7	
Apricots	6	
Apples	6	
Oranges	6	
Prunes	5	
Cucumbers	4	
Strawberries	4	
Tomatoes	3	
Bell peppers	3	
Almonds	3	
Cherries	3	
Sweet corn	2	
Beans	2	
Grapefruit	2	
Grapes	2	
Plums	2	
Fruits and nuts[a]	1	

[a] 18 assorted varieties.

TABLE 6

Farm Facilities
California, 1976

Owned by farmer	Percent of affirmative responses
Tool shed	75
Machine shed	40
Packing shed	22
Storage facilities	36
Cooling facilities	14
Barn or other	53
Well	70

TABLE 7

Operating Expenses
California, 1976

Expense	Median annual cost
	dollars
Labor	6,200
Taxes	760
Interest	700
Other	4,000
Total	11,660

TABLE 8

Supply Sources of Farm Commodities [a]
California, 1976

Farm commodity	Supply sources		
	Coop	Retail	Other
	percent		
Fertilizer	13	97	2
Pesticides	12	97	2
Petroleum products	3	98	2
Machinery and equipment	3	100	0

[a] Based on 60 percent of the responses.

TABLE 9

Irrigation Systems
California, 1976

Irrigation systems	Percent of those responding
Source of Irrigation	
Well	70
Water district	27
Other	3
Distribution systems	
Sprinkler	49
Ditch	51
Drip	8
Flood	6
Other	8
Acres irrigable under present system	31.9
Average approximate worth of system	$5,983

Operating costs are indicated in Table 7. Cash expenses excluding labor, taxes, and interest payment ranged from 0 to more than $300,000 with a median of $4,000. In general, farmers chose to buy their supplies from a retail outlet within 20 miles of their farm, although a few bought through supply cooperatives as well (Table 8).

The responses to inquiries about machinery needed to run a particular farm operation were quite varied (Table 10). Market-value estimates averaged around $9,000 but ranged up to $30,000. The only items that the majority of farmers reported as having in common were a pickup truck, a wheel tractor, a disc, and a sprayer. Again, the range of replies is considerable. While one farmer reported that he had no tractors at all for his 2-acre operation, another listed two crawler tractors and seven wheel tractors of various sizes on his 70 acres. Except in a few cases the majority of farmers tended to purchase their equipment used, although a large number chose to buy new equipment. The frequency of borrowing or sharing equipment with neighbors never exceeded 20 percent for any single piece of equipment; only a few ever rented equipment or contracted out for machinery services. The vast majority of farmers, in turn, never rented out their machinery or did custom work for someone else. Lastly, almost half of the farmers claimed that they have difficulty in finding the appropriate-size equipment to run their operation. It is assumed that many times the equipment available is too large for the task required and is therefore, inefficient.

Marketing

The average time spent on marketing functions by farmers interviewed was a little over 80 hours per year. This figure may be deceptive, however, as the responses ranged from 0 to 999 hours. Much depended on the extent to which the farmer participated in the various physical steps involved in the marketing of his crops. For instance, almost half (43 percent) of those interviewed transported their crops in their own trucks as opposed to transport by the buyer or hired transport (Table 11). The vast majority of these farmers expressed an interest in direct marketing alternatives. Those who participated in roadside stands, pick-your-own, or a farmers' market operation (roughly half) reported that this alternative required on the average of two extra man-months of family labor each year.

As shown in Table 12, the farmers used a variety of outlets in marketing their crops. Almost 70 percent of the farmers were aware of outlets other than those that they were accustomed to use. These farmers gave a variety of answers as to why these other outlets were not used. Over one-quarter claimed that the unused alternatives were more difficult and time-consuming. Other common complaints were that alternatives offered lower prices and lower returns along with higher marketing costs.

TABLE 10

Use of Machinery
California, 1976

Type of machinery	In possession		Purchased new	Purchased old
	1 or more	2 or more		
	percent			
Pickups	85		43	53
Trucks	42		26	70
Trailers	42		12	81
Wagons	15		20	60
Crawler tractor	40		11	78
Wheel tractor	74	19	24	63
Disc	80	19	33	59
Plow	42		41	52
Planters	25		33	45
Fertilizer applicator	46		33	39
Cultivator	28		40	50
Sprayer	68		27	48
Land plane	19		22	57

As suggested earlier, only a small percentage of farmers attempted to store their crops. The majority of farmers tend to leave that part of the crop which they could not sell in the field, although one-half reported that they generally had no surplus at all.

Those interviewed expressed a wide variety of marketing problems for themselves and for farmers in general. As indicated, 46 percent claimed to have problems involved in their own marketing. In a separate reply, farmers stated that one large problem was simply that the market price was lower than the combined harvesting and marketing costs. The response to the question involving marketing problems of farmers in general is shown in Table 13.

The large majority of farmers have considered direct marketing alternatives within their overall marketing strategy (Table 14). Half of their crops were sold through this method. Two-thirds of the farmers thought that direct marketing was a viable alternative. They gave a number of reasons, the most common ones relating to higher income. Among those who thought that direct marketing was not viable, it was most commonly felt that either the farmers could not sell a large enough volume or that such a strategy required too much time and effort. The median volume sold through this method was 13 tons. Eighty percent of the 44 respondents reported that they would continue to use direct marketing alternatives in the future.

Interviewers also asked the farmers from what sources they received their marketing information. Among eight possible responses, the most common sources mentioned were the buyer (37 percent), retail outlets (18 percent), and the Market News Service reports (18 percent). Only 27 percent of the respondents, however, felt that the Federal-State Market News Service or public agencies put out useful marketing information.

TABLE 11

Transporting and Disposition of Crops
Short-Term Financing
California, 1976

	Percent of respondents
Produce transported by:	
Own truck	43
Hired transport	8
Shipper	10
Buyer	30
Processor	6
Marketing coop	4
Crop not sold:	
Given away	8
Stays in field	63
Used for feed	11
Stored	3
Various outlets	11
Other	3
Short-term financing:	
Respondents with past borrowing experience	30
Average number of times of borrowing	10 (times)
Source of loan	
Friend or family	10
Commercial bank	55
Land bank or production credit association	35
Previous owner	0
Farmers Home Administration	0
Percent granted	100
Average repayment period	1 (year)
Loans secured	83
Points	0
Interest rate	9.75
Other services provided by lender	50

TABLE 12

How Farmers Market Their Crops
California, 1976

Average Crops Per Farmer: 1.81
Average Outlets Per Crop: 1.48

Outlet	Times used	Average percent of crop marketed
		percent
Shipper	21	85
Direct to terminal	24	49
Buyer representative	10	37
Fresh market coop	16	77
Private processor	34	76
Coop processor	7	94
Direct marketing		
Roadside	28	59
Farmers' market	9	44
U-Pick	12	55
Direct to retail	3	58

TABLE 13

Common Marketing Problems[a/]
California, 1976

Marketing problems	Percent of responses
Marketing regulations	34
Oversupply or lack of demand	29
Decrease in marketing alternatives	17
Too much middleman control	16
Market caters to large growers	16
Other regulations	14
High marketing costs	14
Too much corporate control	12
Market uncertainty	10
Quality standards too high	7
No farmer control over prices	7
Labor costs	7
High production costs	7
Lack of farmer unity	3
Collusion[b/]	2

a/ 46 percent of respondents claimed to have marketing problems with at least 1 crop; 34 percent of total crops listed had marketing problems involved.

b/ U.S. Department of Agriculture/agribusiness.

Financing and Future Plans

Almost two-thirds of the farmers interviewed had borrowed money to purchase farmland. Among this group, about one-half borrowed either from the Federal Land Bank or from the previous owner.[1] They usually secured the loan with the land being purchased, although a few used land already purchased as security. Meanwhile, less than half borrowed money to purchase equipment or machinery. Only 30 percent have borrowed money to purchase production inputs such as seed, fertilizer, gasoline, and the like. Apart from these replies, the rate of response to questions about financing was remarkably lower than other parts of the survey. The following information about the details of financing farm loans is based on a response frequency well under one-half the normal rate.

Among those who borrowed money to purchase land, less than half (46 percent) had considerable assets at the time when they first made the loan application. But three-fourths of this group felt that the assets which they did have were important in being granted the loan.

Only a few reported that they had ever borrowed from both farm-oriented organizations and commercial banking institutions. Regarding the terms of the loan and the effectiveness of the organization as an overall lending source, the farm-oriented sources were the most popular. Of the farmers contacted, 42 percent responded to how the public lending institutions (including both the farm-oriented groups and the government lending agencies) might be improved. A full 50 percent reported that they had no suggestions at all. Among those that did, a variety of comments were given. The most common suggestion was a desire to have the loan-processing period speeded up. Others felt that more loans should be granted to beginning and low-income farmers, that more information should be made available concerning the different types of loans, that lower interest rates should be established, and that stability of the farm operation should carry more weight as a criterion.

Of the 36 percent that have never borrowed money from a lending institution, the most common response was that the individual did not have to borrow money in the first place. Others either did not know where to go for a loan or, in one case, did not feel he would be given a loan. Some farmers tried to borrow but did not qualify for the loan in question or did not want the indebtedness. Most farmers felt that the current information on where and how to obtain a loan is adequate.

Concerning their future plans, nearly two-thirds of the responding farmers felt that their major concern would be in finding available land or in obtaining the capital necessary to purchase that land. A variety of responses made up the remaining one-third of the farmers. Only one farmer felt that he would have no problems with expanding his operation in the future. Despite their caution and the obstacles involved, most of the farmers interviewed declared that they intended to continue farming for an indefinite period of time.

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[1] For more detail on loans, see Table 15, infra, p. 13.

TABLE 14

Direct Marketing Alternatives
California, 1976

	Yes	No
	percent	
Did you consider direct marketing?	86	14
Do you think direct marketing is viable?	67	33
Do you intend to continue direct marketing in the future?	80	20
Average proportion of crops sold through direct marketing outlets	49	

TABLE 15

Typical Portfolio of Loan Package
California, 1976

Financing	Purchasing land	Loan for machinery or equipment
	percent	
Respondent with past borrowing experience	64	46
Average number of times of borrowing	1	2
Source of Loan		
Friend or family	25	18
Commercial bank	18	36
Land bank or production credit assoc.	29	24
Previous owner	20	12
Farmers Home Administration	0	3
Other	10	6
Percent granted	100	100
Average repayment period	19 (years)	2 (years)
Loans secured	86[a/]	83
Points	0	0
Interest rate	7	9
Other services provided by lender	90[b/]	69[b/]

a/ Through land purchased.

b/ No.

FINANCE TASK FORCE

FINAL REPORT

Small Farm Viability Project

November 1977

ABSTRACT

FINANCE TASK FORCE

In surveying the financing needs of small farmers, the Finance Task Force found that the gaps in availability of funds are more a function of the experience and financial equity of a farmer than of the size of his farm. Adequate financing is generally available for the well established small farmer with years of experience; a shortage of funds exists for the low-equity farmer and for the beginning farmer who has (or contracts for) the requisite skills to run a successful farm but lacks sufficient collateral. The Task Force therefore concentrated its efforts on exploring alternative means of providing financing to the potentially successful low-equity or beginning farmer and low-resource cooperative.

Only a few lending agencies currently have the ability and the mandate to serve low-equity or beginning farmers. The principal organization in this category historically has been the Farmers Home Administration (FmHA). The Small Business Administration (SBA) recently has joined the FmHA in providing low-equity loans in the rural sector. Other current providers for these farmers include (1) community-based, nonprofit community development corporations, which obtain a portion of their capital from public funding sources, and (2) Business Investment Development Corporations (BIDCOs), also nonprofit corporations, funded by member institutions and designed to promote economic development by spreading loan risk among lenders.

The joint financing capacity of all the sources cited above are inadequate to meet the current and future needs of low-equity and beginning farmers. FmHA alone has a 2.6-year backlog of loan applications, and it is not able to serve cooperatives, which can be a major vehicle for increasing family-farm viability. Neither the FmHA nor the SBA has sufficient personnel to provide technical assistance through supervised credit.

In order to improve and expand the services offered by the existing small-farm finance system, the Finance Task Force recommends that the FmHA and SBA establish complementary programs whereby the FmHA issues guarantees to cover the purchase of farm land and the SBA guarantees loans for operating capital. Both agencies should recognize all kinds of cooperatives and their members as eligible borrowers, and they should institute technical assistance and supervised credit programs. The FmHA could augment its present financing capacity greatly by reducing the reserve it holds against default, retaining only the expected loss from bad debts. It would further increase its effectiveness by adopting a licensee arrangement with Local Development Corporations, Small Business Investment Corporations, and the like. The federal government also should consider increased direct funding of the FmHA.

The Task Force further recommends that the State undertake measures to improve the access of family farmers to land. Such measures should (1) ensure that land be sold at prices consonant with earning capacity, (2) establish means of keeping prime agricultural land in farming,

(3) consider controls to limit corporate and foreign ownership of land, (4) support implementation of existing Reclamation Act provisions, and (5) facilitate the long-term lease of public lands to small farmers.

The Task Force also believes that the use of the federal tax preference rate on capital gains as applied to agricultural lands should be restricted, either by eliminating it altogether or by increasing the mandatory holding period beyond one year. The tax preference on income derived from capital gains induces investors to purchase land in the expectation of capital appreciation. This bids up the price of agricultural land and effectively keeps many potential small farmers out of farming, since the land's productive capacity is frequently insufficient to cover the indebtedness incurred to purchase it.

Even if the above recommendations were implemented, however, the financing available to low-equity and beginning farmers would be inadequate to meet present or future needs. Therefore, the Task Force recommends that the State take positive action toward the encouragement of the family farm by instituting the following measures: (1) creation of a Rural Development Office to serve as a public advocate for family farmers, to disseminate information about programs designed to aid them, and to conduct studies, write legislation, and coordinate small-farmer programs when they are enacted, and (2) creation of a financial and technical assistance institution to serve the needs of small farmers. This institution would be able to make grants and subsidized loans to farmers who lacked access to existing lending resources. It could also leverage outside capital and provide technical assistance, either directly or by contracting with local agencies.

FINAL REPORT

FINANCE TASK FORCE

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I. INTRODUCTION

The Finance Task Force of the Small Farm Viability Planning Project has assessed the problems that family-farm operators face in obtaining credit; it has determined specific financing needs (Section II), identified the resources currently available to meet them (Section III), and recommended new means of meeting those needs that are not adequately serviced at present (Section IV).

The Finance Task Force was composed of 22 members, all of them experienced in farm finance or related aspects of agriculture. Included were representatives of:

- the farm sector: four members
- planning groups working with farmers: four members
- state agencies: three members
- federal agencies: two members
- private financial institutions: one member
- citizens' groups: two members
- state legislature: one member
- universities: five members, representing four different schools

The structure of the Small Farm Viability Planning Project and the nature of the Task Force membership were such that the group was not able to undertake major new research. Therefore, it adopted an operational methodology of reviewing available information, including existing research and data from various financial institutions, both governmental and private, and of drawing heavily on the cumulative knowledge of the Task Force members. Information was also requested from individuals whose institutions or personal views were not represented within the working group: farmers, financial institutions, educators, and governmental agencies.

So that the Task Force members could share the same concept of the types of financial operations involved in small farming and the problems that exist, the group developed several case studies of individual farms, based on a nonrandom sample. In addition, each Task Force member took on specific assignments to develop materials in the areas in which he or she was most knowledgeable.

The Task Force looked at a number of different types of farming operations, but it was concerned with two broad classifications of farmers: (1) current small-farm operators who wish to continue in farming, and (2) potential new entrants.

Because there is such a wide diversity in types of farm operations, the Task Force attempted to concentrate on four general classifications of small farms:

> The Full-Time Family Farm: This is a farm on which the individual operator and his family participate both in the management and in the labor. The farm is the only source of income for the family, and from it the family meets all its financial obligations, both for the operation and maintenance of the farm and for family living costs.

The Part-Time Family Farm: This is an operation in which the owner/operator may work off the farm part of the time, but still relies on it to cover its own expenses and in addition return something to the family's income. (This distinguishes it from the hobby farm and the farm run as a secondary business venture to supplement primary family income.)

The Production Cooperative: This is an operation in which several families or individuals join together under a corporate structure involving joint management and marketing and sometimes joint ownership. Production cooperatives develop in various ways, but the emphasis in this study is on operations that return an income to each member family sufficient to maintain its livelihood.

The Restricted Purpose Cooperative: This is a cooperative venture in agricultural production in which only certain farming activities are handled cooperatively, e.g., management, marketing, or machinery ownership and use. This differs from the general cooperative in that each family unit handles its own record keeping and financing.

The Task Force identified the three basic types of financing needed by small-scale operators:

(1) annual operating expenses--financing for normal expenditures of the annual production cycle, e.g., fuel, seed, fertilizer, labor, etc., and sometimes for family living expenses;

(2) intermediate financing--financing for capital assets such as equipment and machinery in which repayment extends beyond one year; and

(3) long-term financing--financing for land, housing, major farm buildings, etc., in which the repayment period is relatively long.

The Finance Task Force did not try to define in precise terms what constitutes a small farm. Some basic points are obvious. The definition of a small farm cannot be arrived at by considering acreage alone; income per crop varies too much for this. Nor is gross income truly adequate, because the profit margin on crops varies widely. Net income is problematical because it requires setting a minimum income level as adequate, and this varies with individual life styles.

Therefore, the Finance Task Force based its definition of the small farm first on the type of operational structure involved: the family farm on which the operator-owner is manager and, along with the family, performs the necessary labor. Secondly, farm income must be adequate for the needs of the operator, i.e., it must generate enough net profit to maintain the owner and his family at a satisfactory level. For the low-resource farmer who finds it necessary to supplement his farm income with off-farm work, farm income should represent a significant portion of his total income.

This is a very loose definition, but any program to support the family farm must recognize the necessity of adequate income and a return to labor high enough to meet the needs of the operator and his family. No program should keep people on the farm or bring new people into farming unless the farms are able to return a satisfactory income to the owners. This would not preclude the possibility of some form of subsidization, either through price supports or direct payments.

The Task Force found it useful initially to list possible alternative ways to deal with small-farm financing problems. Some of these alternatives were included in the financing model which the group ultimately proposed; others were not. The reasons for this will become clear in Section IV (Recommendations).

(1) Propose a permanent interest-rate subsidy on the financing of small farmers.

> The implicit assumption behind this alternative is that small farms cannot support themselves, but their existence is deemed socially desirable, thereby warranting a publicly financed subsidy.
>
> This policy could be handled either through government subsidies and guarantees of privately made loans or through a direct loan program.

(2) Propose an initial interest-rate subsidy for beginning and existing low-equity farmers with the stipulation that they graduate to market sources of capital when they are well enough established.

> This alternative assumes that small farms are viable, but because of imperfections in the capital market or factors peculiar to farming, an initial subsidy is required.
>
> This policy could be implemented by increasing the funding of the Farmers Home Administration (FmHA), or through one or more new models that might be proposed, e.g., a state-financed development corporation that would provide funding for rural projects and low-income farmers.

(3) Encourage production cooperatives, farmworker cooperatives, and other such organizations through the provision of financing and technical assistance.

> This alternative recognizes that the current market does not provide adequate sources of capital to certain areas of farming and assumes that the social benefits of these programs are greater than the costs.

This recommendation could be carried out either by changing the policy of existing institutions (FmHA, Small Business Administration, and others) or through increased funding of CDCs that specialize in this area.

(4) Allow the capital market system to allocate funds among competing users, i.e., recommend that no changes be made.

This assumes perfect capital markets and the absence of externalities that result in the divergence of private and social costs.

II. FINANCING NEEDS OF SMALL FARMERS

The Finance Task Force has identified the following problems that small farmers encounter in obtaining financing:

1. Farmers do not have easy access to information.

Despite the fact that we live in a society with tremendous mechanisms for the transfer of knowledge and information, one of the major problems in credit and financing is the lack of communication of this knowledge. Following is a breakdown of the types of information and knowledge that must be provided:

a. Credit availability. Small farmers need to know what agencies, private institutions, and programs are involved in extending agricultural credit.

b. How to apply for credit. Small farmers need assistance in developing financial plans and loan requests to present to lending institutions.

c. How to use credit wisely. Credit institutions do not have time to educate borrowers on how to use credit resources. This type of know-how is badly lacking among most small operators.

d. How to obtain credit tailored to agricultural operations. Many providers of credit, especially those that do not deal exclusively with agriculture or do not have divisions that deal directly with agriculture, have difficulty tailoring their programs to meet the needs of the small farmer. They may be unaware, for example, of the need to extend credit based on repayment schedules geared to the farmer's reasonable ability to pay. This is not necessarily the fault or the desire of the lender. Banks, for example, may lack flexibility because they must operate within guidelines established by the State.

A liaison agent between the small farmer and lending institutions is needed to analyze the needs and limitations of both and put them together into a compatible package. Lack of communication is compounded in some cases by a language barrier or the small farmer's general lack of knowledge. In most cases, financial institutions are not organized to play a liaison role.

2. The element of the unknown, peculiar to agriculture, interferes with obtaining financing.

   a. Agriculture is an industry composed of small units, no single one of which can exert an influence on price. In most cases individual farmers have no control over the prices they receive. This is detrimental in obtaining credit.

   b. The inelastic nature of the demand for agricultural products, coupled with fluctuation in supply, causes wide swings in price and profitability. The individual farmer has little or no control over these factors. Farming is by nature a risky operation, and this must be taken into account when the farmer requests financing.

   c. Agricultural production is biological; in the case of livestock, for example, it is tied to the reproductive cycle, and in the case of crops, to the annual production cycle. These cycles can be stopped quickly either by nature or by the will of man, but they cannot be started again instantaneously. Therefore, production expands slowly, and for many crops and livestock enterprises there is a delay before mortgage and loan repayments can begin.

   d. The above problems are compounded by the dwindling number of small farms and the fact that only 5% of the population is now engaged in agricultural production. This affects the number of people with a background in agriculture who are employed by banks and other institutions. It also affects the amount of money dedicated to agricultural loans, which is dwindling as a percentage of total loans. Therefore, the institutions cannot put as much manpower into processing agricultural applications, nor can they give the individual help they once gave.

3. Real estate and development loans for investments which are characterized by long-delayed income (e.g., for orchards) are difficult for small family farmers to obtain.

   Although this is a problem for all agricultural producers, small farmers with little or no equity to fall back on find it doubly difficult to obtain such long-term financing.

4. Programs and agencies set up to finance agriculture (FmHA, Production Credit Associations, Federal Land Bank, Bank of Cooperatives) are unable or unwilling to take the risks necessary to finance the beginning farmer.

   The Farmers' Home Administration had Title III funds for small farms and cooperatives until 1971, when they were frozen. This program was set up primarily to assist low-income families with loans despite the margin of risk involved. Since its suspension, low-income borrowers have had to rely completely upon the regular FmHA financing program, which requires that loans be based on sound collateral, that the enterprise be one that is common to the area, and that it be one in which the applicant has had experience.

5. There is no existing program for funding agricultural production cooperatives or limited-purpose cooperatives such as machinery pools.

The Bank for Cooperatives is more conservative in many ways than commercial banking institutions, and it is not willing to venture into the relatively new area of financing production cooperatives. The FmHA, by administrative edict, is not permitted to make loans in this area.

6. The Farmers' Home Administration, which is the one agency set up to work directly with the small and family-sized farm, does not have adequate resources to meet the demand for loans under its present program.

This represents a serious oversight on the part of Congress and the agricultural industry, for while interest in encouraging family farms is growing, adequate resources in the form of loans are not available to supply even the existing demand.

7. There is a feeling among most small farmers and those attempting to get into agriculture that entities such as the Federal Land Bank, Production Credit Associations, and others have become more conservative over the years and are now unwilling to help small units get established.

This may be due to the amount of large-scale business they do, which prevents their seeing the need to search out new markets. There is a need for more financing that might be termed risky by the commercial institutions.

8. Financing of small-farm units has become synonymous with poor credit risks.

The policies of many lending institutions clearly demonstrate that they consider small farms uneconomical. The Task Force was told that local finance officers sometimes have difficulty getting their superiors to approve small loans because it is assumed that small ventures will not be profitable.

9. Returns on farm production make it difficult to pay high interest rates or compete with other enterprises for credit.

This is especially true for the smaller unit. While it can be argued that agriculture should have to compete with every other business at the same interest rate, the Farmers' Home Administration, the Small Business Administration, and others have always given an interest rate advantage to some of their clients. This is also true of the Economic Development Administration, which attempts to spur the economy of low-income areas. The need to explore anew the basic reasoning and justification for an interest rate advantage for the small farming unit is therefore apparent.

10. Inflated land prices are a detriment to small farming, especially to the individual trying to enter.

    Inflated prices are due to an increment not attributed to agricultural capacity. An example of how this can cause a problem is the fact that the Farmers' Home Administration can make a 100% loan on land acquisition based on market price, but in many cases the land's productivity is not sufficient to pay back the interest and the principle. Therefore, FmHA has to work mainly with individuals who already have some equity, either in land or in something else. In many areas inflated prices also raise the taxes. In some areas this has been partly mitigated through such programs as the Williamson Act, but it still remains a problem to many small operators.

11. Small farming is out.

    Even though all do not agree, there is an overriding impression in the U.S. today that small farming is out. People frequently say that there is no way to get into agriculture unless you are rich, you inherit a farm, or you marry someone with one. If there are to be relevant programs to assist small farmers, this feeling must be countered with sound, rational arguments.

III. FINANCING RESOURCES AVAILABLE TO THE SMALL FARMER

The capital to run and finance a farm comes essentially from three sources:

(1) the farmer's equity base (retained earnings and personal wealth);
(2) the cash flows generated from operations; and
(3) debt.

Table 1, a statement of sources and uses of funds in the farming sector, shows the composition of the capital structure of a typical farm. Table 2 shows how the capital structure of a farm varies in relation to gross sales class. It is apparent that small farms (i.e., Class IV and smaller) tend to use more debt in financing their real estate and less debt in the nonreal estate area than the average-size farm.

Since the cash flows generated from operations and the equity base of the farmer are beyond our immediate control, the source of funds that most concerns us is debt.

A farmer's credit needs can be divided into two general areas: real estate and nonreal estate debt. Nonreal estate debt can be further subdivided into annual operating expenses and intermediate term financing. Each of the above fulfills an important role in financing a farm. Leasing, of course, is an alternative to debt financing. The implications of leasing will be covered later in this report.

TABLE 1

SOURCES AND USES OF FUNDS; STOCKS OF ASSETS AND LOANS OUTSTANDING OF THE FARMING SECTOR, 1970, 1975, 1976, AND FORECAST FOR 1977

	1970	1975	1976	1977
	Billion Dollars			
Cash sources of funds from:				
Cash income, farm and off-farm	37.5	62.6	66.0	66.2
Net flow of real estate loan funds	1.1	4.6	5.8	7.0
Net flow of nonreal estate loan funds	1.1	4.2	5.0	4.0
Total cash sources	39.7	71.4	76.8	77.2
Cash uses of funds:				
Purchases of machinery and motor vehicles	4.9	8.9	9.6	10.0
Capital improvement to real estate assets	2.4	3.8	3.8	4.3
Other capital formation	1.5	1.3	1.7	1.9
Annual capital formation	8.8	14.0	15.1	16.2
Purchases of real estate from discontinuing proprietors	3.6	8.2	8.7	10.5
Total cash flow of capital	12.4	22.2	23.8	26.7
Personal consumption and other uses	27.3	49.2	53.0	50.5
Total cash uses	39.7	71.4	76.8	77.2
Stocks of assets and loans outstanding, December 31:				
Real estate assets	215.0	422.3	460.3	492.4
Other physical assets	70.1	131.4	140.3	154.3
Financial assets	23.6	31.7	33.4	33.6
Total farm assets	317.7	585.4	634.0	679.3
Real estate debt	30.3	50.9	56.7	63.7
Nonreal estate debt	22.2	39.4	44.4	48.4
CCC nonrecourse loans	1.9	.3	.5	.5
Total debt claims	54.4	90.6	101.6	112.6
Equity	263.3	494.8	532.4	566.7

Note: For description of this table see Agricultural Finance Outlook, (AFO-17).

TABLE 2
PERCENTAGE DISTRIBUTION OF BALANCE SHEET OF THE FARMING SECTOR BY VALUE OF SALES CLASS, JANUARY 1, 1975

Item	Gross sales							
	IA $100,000 and over	IB $40,000 to $99,999	II $20,000 to $39,999	III $10,000 to $19,999	IV $5,000 to $9,999	V $2,500 to $4,999	VI Less than $2,500	All farms
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
	Components as shares of total assets and claims							
ASSETS								
Physical assets:								
Real estate	71.4	71.4	70.8	71.5	72.1	73.1	69.1	71.3
Nonreal estate:								
Livestock and poultry[1]	6.6	4.6	4.5	4.3	4.0	3.6	2.2	4.7
Machinery and motor vehicles	7.9	11.3	12.3	12.3	11.9	11.3	9.8	10.9
Crops stored on and off farms[2]	3.1	5.7	5.9	5.3	3.8	2.3	1.0	4.5
Household equipment and furnishings	2.1	2.0	2.3	2.7	3.7	4.5	9.0	2.9
Financial assets:								
Deposits and currency	4.1	2.2	2.0	2.0	2.5	3.1	5.6	2.9
U.S. savings bonds	.6	.5	.6	.7	1.0	1.4	2.8	.8
Investments in cooperatives	4.2	2.1	1.6	1.2	1.0	.7	.5	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CLAIMS								
Liabilities:								
Real estate debt	49.9	64.6	57.6	44.8	72.1	71.8	72.2	56.6
Nonreal estate debt:								
Excluding CCC loans	49.9	34.9	41.8	54.5	27.4	27.3	27.4	43.0
CCC loans[3]	.2	.5	.6	.7	.5	.9	.4	.4
Total liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors' equities (equity ratio)	71.5	82.7	87.0	89.4	89.8	96.5	96.6	84.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Shares of total component value							
ASSETS								
Physical assets:								
Real estate	21.9	24.7	24.8	9.4	4.9	7.2	7.1	100.0
Nonreal estate:								
Livestock and poultry[1]	30.3	24.4	23.7	8.6	4.1	5.4	3.5	100.0
Machinery and motor vehicles	16.0	25.8	28.4	10.6	5.3	7.3	6.6	100.0
Crops stored on and off farms[2]	15.0	31.5	33 6	11.0	4.1	3.6	1.7	100.0
Household equipment and furnishings	15.3	17.0	19.8	8.5	6.0	10.8	22.6	100.0
Financial assets:								
Deposits and currency	30.9	19.2	17.1	6.6	4.2	7.6	14.4	100.0
U.S. savings bonds	16.3	16.0	17.2	8.0	6.0	11.5	25.0	100 0
Investments in cooperatives	45.0	24.0	19.2	5.4	2.2	2.3	1.9	100.0
Total	21.8	24.6	25.0	9.4	4.8	7.0	7.4	100.0
CLAIMS								
Liabilities:								
Real estate debt	35.0	31.0	21.0	5.0	4.0	2.0	2.0	100.0
Nonreal estate debt:								
Excluding CCC loans	46.0	22.0	20.0	8.0	2.0	1.0	1.0	100.0
CCC loans[3]	15.0	32.2	33.2	10.6	3.8	3.4	1.8	100.0
Total liabilities	39.7	27.1	20.6	6.3	3.1	1.6	1.6	100.0
Proprietors' equities	18.5	24.2	25.8	9.9	5.2	8.0	8.4	100.0
Total	21.8	24.6	25.0	9.4	4.8	7.0	7.4	100.0

[1] Excluding horses, mules, and commercial broilers. [2] All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers. [3] Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Source: Balance Sheet of the Farming Sector, 1976, ERS, USDA.

This section of the Finance Task Force report will present a general overview of the farm credit system in California, broken down by type of debt and lender. It will examine each credit source in detail and assess how well it meets the small-farmer needs identified earlier. A descriptive background of each lender will be presented, along with eligibility requirements, other loan information (when available), and an evaluation of the lender's role in financing the small farmer. Most of this information was obtained directly from the lending agencies discussed.

GENERAL OVERVIEW OF CALIFORNIA'S FARM FINANCE SYSTEM

California real estate farm-loan holdings from 1960 to 1975, by source, are given in Table 3. This table is reproduced in percentage terms in Table 4. It is seen that the Federal Land Bank has steadily grown in importance as a source of real estate loans, increasing from 13% of the market in 1960 to 23.7% in 1975.

Life insurance companies have also increased in importance, moving from 13.3% to 22.7%, though they have declined somewhat over the past six years from a peak of 25.6% of the market in 1969. Commercial banks have remained relatively constant, with market share fluctuating between 6% and 8%, while the individuals and others category, even though still representing the largest single component of farm real estate loans, has declined from 66.7% in 1960 to 46.6% in 1975. Farmers' Home Administration, a potentially important source of funds for small, low-equity farmers, has been increasing over time (0.4% to 0.7%), even though it still comprises a very small share of the total market.

California nonreal estate farm loan holdings from 1967 to 1976, by source, are given in dollar terms in Table 5 and percentage terms in Table 6. Production Credit Associations have greatly increased their market share, growing from 14% in 1967 to 29.1% in 1976. Other financial institutions (banks using the discounting services of the Federal Intermediate Credit Bank) have remained fairly constant with a small share of the market. FmHA has declined steadily in importance (1.2% to 0.4%). Commercial banks are still the largest source of nonreal estate funds, but their market share has declined considerably (83.4% in 1967 to 69.2% in 1976), reflecting the increasing importance of the PCA.

The Bank for Cooperatives (part of the Farm Credit Administration) does not publish a breakdown of its agricultural loans into real estate and nonreal estate categories. Therefore we have presented its aggregate California loan volume, along with the total volume of the other members of the FCA, in Table 7. Loan volume has grown from $162 million in 1969 to $613 million in 1975.

There are also many small agencies and organizations of importance to the small farmer that will be covered in the individual reports.

INDIVIDUAL LENDER REPORTS

I. Farm Credit Administration

The Farm Credit Administration is an independent agency of the executive branch of the federal government. Its purpose is to supervise

TABLE 3

California Real Estate Farm Loan Holdings, by Lender*
In Thousands

Year	FLB	FmHA	Life Insurance Companies	All Banks	Individuals and Others	Total
1960	161,407	4,929	165,569	81,734	827,099	1,240,738
1961	171,412	5,275	184,894	85,499	873,204	1,320,284
1962	187,167	6,917	208,760	88,171	934,968	1,425,983
1963	198,472	7,714	233,215	100,586	1,018,826	1,558,813
1964	210,351	8,545	267,628	114,902	998,818	1,600,244
1965	233,566	9,373	325,703	129,893	1,006,189	1,704,724
1966	273,905	10,928	409,900	140,217	1,120,774	1,955,724
1967	318,026	12,143	461,759	148,980	1,187,086	2,127,994
1968	363,312	13,467	521,900	164,662	1,096,791	2,160,132
1969	385,750	15,008	564,300	179,331	1,055,839	2,200,228
1970	423,384	16,664	584,900	190,806	1,137,691	2,353,445
1971	456,560	17,838	592,600	203,060	1,181,832	2,451,890
1972	511,155	19,112	608,900	227,083	1,238,855	2,605,105
1973	594,100	24,240	652,700	209,657	1,395,699	2,876,396
1974	757,108	25,765	741,300	196,616	1,653,091	3,373,880
1975	923,907	28,426	884,500	247,721	1,819,832	3,904,386

*Source: USDA, ERS, Agricultural Finance Statistics, 1976.

TABLE 4

California Real Estate Farm Loan Holdings, by Lender, in Percentage Terms

Year	FLB	FmHA	Life Ins. Companies	Banks	Individuals & Others
1960	13.0	.4	13.3	6.6	66.7
1961	13.0	.4	14.0	6.5	66.1
1962	13.1	.5	14.6	6.2	65.6
1963	12.7	.5	15.0	6.5	65.4
1964	13.1	.5	16.7	7.2	62.4
1965	13.7	.5	19.1	7.6	59.0
1966	14.0	.6	21.0	7.2	57.3
1967	14.9	.6	21.7	7.0	55.8
1968	16.8	.6	24.2	7.6	50.8
1969	17.5	.7	25.6	8.2	48.0
1970	18.0	.7	24.9	8.1	48.3
1971	18.6	.7	24.2	8.3	48.2
1972	19.6	.7	23.4	8.7	47.6
1973	20.7	.8	22.7	7.3	48.5
1974	22.4	.8	22.0	5.8	49.0
1975	23.7	.7	22.7	6.3	46.6

TABLE 5

California Nonreal Estate Farm Loan Holdings, by Lender*
In Thousands

Year	PCA	OFI's Indebted to FICB's	FmHA	Commercial Banks	Total
1967	130,782	12,395	11,198	776,257	930,632
1968	140,940	14,922	12,528	803,038	971,428
1969	150,743	21,549	12,918	823,297	1,008,607
1970	170,748	24,119	11,556	866,370	1,072,793
1971	206,634	24,620	10,482	855,148	1,096,884
1972	249,936	27,934	9,262	989,744	1,276,876
1973	294,639	23,873	8,459	1,254,772	1,581,743
1974	394,125	22,942	7,711	1,559,375	1,984,153
1975	570,845	26,710	7,939	1,583,707	2,189,201
1976	680,339	28,551	10,777	1,614,333	2,334,000

*Source: U.S. Farm Credit Association, Nonreal Estate. Farm Debt, various years, obtained from USDA Estimates.

TABLE 6

California Nonreal Estate Farm Loan Holdings,
by Lender, in Percentage Terms

Year	% PCA	% OFI	% FmHA	% Commercial Banks
1967	14.0	1.3	1.2	83.4
1968	14.5	1.5	1.3	82.7
1969	14.9	2.1	1.3	81.6
1970	15.9	2.2	1.0	80.8
1971	18.8	2.2	.9	78.0
1972	19.6	2.2	.7	77.5
1973	18.6	1.5	.5	79.0
1974	19.9	1.2	.3	78.6
1975	26.1	1.2	.3	72.3
1976	29.1	1.2	.4	69.2

TABLE 7

6

California FCA Annual Loan Volume, by Lender*
In Thousands

	FLB			Discounts	Bank for Coops		
	#	Amount	PCA	to OFI's	#	Amount	Total
1969	1125	71,905	332,449	63,934	99	162,004	630,292
1970	999	67,408	413,848	69,138	95	190,443	740,837
1971	1183	99,619	504,895	69,181	95	162,835	836,530
1972	1624	145,208	604,033	75,358	99	153,857	978,456
1973	2124	244,560	830,647	76,772	101	232,776	1,384,755
1974	2143	261,039	1,101,696	67,510	105	487,143	1,917,385
1975	1694	224,024	1,361,913	81,114	118	613,057	2,280,108

*Source: Annual Report, Loans and Discounts of Farm Credit Banks and Association, various issues.

the different, privately-owned lenders of the Cooperative Farm Credit System: Federal Land Banks, Production Credit Associations, and Banks for Cooperatives. Funds are raised mainly through the issue of debt instruments on the money market. The Federal Intermediate Credit Bank serves as an intermediary for the PCAs.

Each of the lending organizations is run in a cooperative manner, i.e., borrowers purchase "stock" in the organization and in turn have a voice in management by electing the local boards of directors. The lending criteria of these institutions vary from case to case and are not usually published in policy statements.

a. Federal Land Bank

Background:

The Federal Land Bank makes long-term loans secured by first mortgages on farm real estate. Loans are granted for periods of five to 40 years and may be up to 85% of market value at the security, with interest rates tied to current money market conditions.

Eligibility Requirements:

FLB borrowers must have past experience in farm management and a sound cash flow history; they must currently run a stable farming operation.[1]

Evaluation:

FLB of Sacramento provided a breakdown of their California loans by gross farm income of borrower, loan amount, average gross farm income, and security acres. This information indicates that a substantial percentage of FLB loans go to small farmers. As seen in Table 8, 38% of the loans made and 13% of the loan volume went to farms with a gross income of less than $25,000. Also, 22% of the loans made were covered by security averaging 79 acres and 16% by security averaging 172 acres.

b. Production Credit Association

Background:

PCAs make primarily short and intermediate-term nonreal estate loans with maturities of one to seven years. Interest rates are based on the borrowing rates of the Federal Intermediate Credit Bank on the money market. Borrowing requirements are essentially the same as for the FLB.

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[1] Pelzer and Matze, Resource Guide for Small Farmers

TABLE 8

FARMBANK RESEARCH AND INFORMATION SERVICE

RUST 1195-1 GROSS INCOME RELATED TO SIZE OF LOAN OR FARM SACRAMENTO

LOANS: 4/25/77 EDIT#1130 REPORTING PERIOD BY DATE BOOKED: 1/01/74 THROUGH 12/31/76 REPORTING AREA: SUMMARY OF ALL AREAS ON THIS REPORT

GROSS AG INCOME	NUMBER	%	LOAN AMT		NON-ZERO AVERAGE	GROSS AG INC		NON-ZERO AVERAGE	SECURITY ACR		NON-ZERO AVERAGE
$0 - $9,999	1585	22%	$54,511,900	6%	$34,392	$7,432,734	1%	$4,830	124,424	5%	79
$10,000 - $24,999	1162	16%	$57,611,300	7%	$49,579	$19,065,900	1%	$16,408	200,368	8%	172
$25,000 - $49,999	1069	15%	$72,584,700	8%	$67,900	$37,863,265	3%	$35,419	258,317	10%	242
$50,000 - $99,999	1054	14%	$100,878,400	11%	$95,708	$73,947,978	5%	$70,159	433,426	17%	411
$100,000 - $149,999	510	7%	$64,281,600	7%	$126,042	$62,027,991	4%	$121,624	284,538	11%	558
$150,000 - $199,999	334	5%	$56,924,300	6%	$170,432	$57,462,393	4%	$172,043	223,594	9%	669
$200,000 - $249,999	244	3%	$45,267,300	5%	$177,325	$54,420,914	4%	$223,037	180,939	7%	742
$250,000 - $299,999	175	2%	$33,170,600	4%	$189,546	$47,732,135	3%	$272,755	91,012	4%	520
$300,000 - $349,999	144	2%	$27,739,600	3%	$192,636	$46,432,142	3%	$322,445	61,151	3%	564
$350,000 - $399,999	113	2%	$29,221,400	3%	$258,596	$42,229,724	3%	$373,714	78,125	3%	691
$400,000 - $449,999	99	1%	$19,844,300	2%	$200,447	$41,920,328	3%	$423,438	65,876	3%	665
$450,000 - $499,999	78	1%	$27,758,100	3%	$355,873	$37,076,482	2%	$475,340	57,032	2%	731
$500,000 - $549,999	66	1%	$17,958,200	2%	$272,094	$34,314,241	2%	$519,913	18,428	1%	279
$550,000 - $599,999	52	1%	$16,686,700	2%	$320,898	$29,910,996	2%	$575,211	28,649	1%	551
$600,000 - $649,999	32	0%	$19,346,900	2%	$604,591	$19,737,604	1%	$616,800	47,116	2%	1,472
$650,000 & UP	416	6%	$226,803,900	26%	$545,202	$873,941,874	59%	$2,100,822	349,202	14%	839
- BLANK	226	3%	$9,827,300	1%	$43,484	$0	0%		5,481	0%	24
TOTAL	7359	100%	$878,414,500	100%	$119,366	$1,485,516,701	100%	$209,612	2,527,678	100%	343

Source: FLB of Sacramento

Evaluation:

FICB of Sacramento does not have as detailed a data base as FLB, so the information it provided included only the number of loans made, by size of loan.[1] The conclusions to be drawn from the data are very similar to those for the FLB. The PCA makes many small loans; the bulk of its loans, however, are in the higher categories ($50,000 and over). An administrator stated that PCA would like to make more small loans, because they provide good training for new loan officers and help service the farming sector. He also mentioned that the average fixed cost of making a small loan is higher than for a large loan because both require the same amount of administrative time. (This fact is common to all lenders, and it generally leads them to concentrate on large loans.)

c. Bank for Cooperatives

Background:

The Bank for Cooperatives provides a complete loan service to marketing, supply, and business cooperatives (see Table 7 for annual California loan volume, 1969-1975).

Banks for Cooperatives do not currently make loans to production cooperatives, so they are of limited significance to our study.

General Evaluation of the Cooperative Farm Credit System:

From the data we have gathered it is apparent that the various agencies of the Farm Credit System make many loans to small farmers. Figures were not available that would permit us to determine whether excess demand for funds exists among small farmers qualifying for FCS loans. Administrators indicated that a shortage of funds is not currently a problem due to the FCS's favorable borrowing position in the money market. In any case, there is a general consensus in the literature that it is not the small farmer per se who has trouble obtaining credit, but rather the low-equity small farmer and particularly the low-equity beginning farmer. The agencies of the FCS are reluctant to loan to this type of borrower because of the risks involved and because of the high demand for loans from more stable, established small farmers.

2. Farmers' Home Administration

Background:

FmHA makes many different types of loans, the most important of which, for our purposes, are their Farm Ownership and Farm Operating Loans.

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[1] It was requested that this information not be disseminated in disaggregated form.

Farm Ownership Loans may be used to enlarge or buy farms, make capital improvements, and refinance debt. The statutory limits are $100,000 per loan, 40 years for repayment, and 5% interest. This may be combined with up to $125,000 in loans from other sources. In certain cases FmHA will accept a second-lien position in a participation loan contract with another lender.

Farm Operating Loans can be used for any nonreal estate purpose necessary to the success of the farm enterprise. These loans are made with a repayment period of one to seven years at an interest rate set each July 1. The maximum loan amount is $50,000.

The above loans may be of two types: guaranteed loans in which the loan is made and serviced by a private lender and FmHA agrees to limit the possible loss from default, and insured loans which are made and serviced directly by the agency.

Eligibility Requirements:

a. Farm Ownership Loans--the applicant must:

   (1) have recent farm experience or training needed to succeed in the farming operation;

   (2) possess the character, industry, and ability to carry out the farm operation or nonfarm enterprise;

   (3) manage and operate the farm or nonfarm enterprise;

   (4) be unable to obtain sufficient credit elsewhere at reasonable rates and terms to finance actual needs;

   (5) be a citizen of the U.S. and of legal age;

   (6) after the loan is made, be the owner-operator of a family farm that will produce a substantial portion of the total family income;

   (7) be able to obtain operating capital, including money for livestock and equipment;

   (8) be an individual who must rely on farm income to have a reasonable standard of living;

   (9) be able to refinance the unpaid balance of the loan when it is feasible for him to rely solely on commercial credit sources; and

   (10) be able to maintain his property and pay taxes and property insurance when due.

b. Farm Operating Loans

(1) Same requirements as ownership loans, plus

(2) the applicant must have a lease of sufficient duration and a farm of sufficient size and productivity to carry out a successful farming program.

Evaluation:

While the volume of California FmHA loans has been increasing (see Table 9), demand for funds greatly exceeds supply. There are several reasons for this:

(1) FmHA is designed to make loans to farmers who cannot obtain credit through the private credit market; it acts as a "lender of last resort."

(2) The interest rates on FmHA loans are substantially lower than market rates.

(3) The available funds and administrative capacity of FmHA are limited by budget constraints.

All of the above combine to create a situation of excess demand. A recent survey obtained from FmHA indicated that there is a high backlog of real estate loan applications in Califoria (see Table 10). As of June 1, 1977, FmHA had already reached its funding limit for the fiscal year and had 142 applications on hand that could not be filled. It anticipated receiving another 123 applications before the end of the fiscal year. The shortage of funds for FY '77 was therefore $12,461,500. Since FmHA's annual California real estate loan budget is approximately $4.8 million, this represents a backlog of about 2.6 years. The FmHA loans would be combined with an estimated $8,505,800 in money from participating lenders, so the actual level of funds that could be made available to small farmers if FmHA had increased funding is $20,967,300.

There is currently no shortage of funds in the operating loan category.

3. Small Business Administration

Background:

SBA has recently broadened its definition of eligible borrowers to include small farmers. It is able to make loans to finance the purchase of real estate and equipment, capital improvements, operating expenses, and refinancing of debt. Direct loans have a limit of $150,000; guaranteed participation loans are limited to $350,000, or a maximum of $500,000 in exceptional cases. Interest rates range from 6% to 8%.

TABLE 9

FmHA Loan Volume in California, by Type*

	6-73	6-74	6-75	9-76**
Operating Loans	3,499,040	4,507,010	5,487,140	7,235,850
Number of Loans	265	306	325	416
Average Loan	13,204	14,729	16,884	17,394
% Increase in Volume	--	29	22	32**
Farm Ownership Loan	2,862,950	3,040,870	3,442,860	6,601,380
Number of Loans	70	73	69	108
Average Loan	40,899	41,656	49,897	61,124
% Increase in Volume	--	6%	13%	92%**

*Source: Unpublished report from Farmers Home Administration.
**Reflects Change in Fiscal Year.

TABLE 10

FARMERS HOME ADMINISTRATION

FARM REAL ESTATE LOAN APPLICATIONS

Date	Amount of Backlog	Number That Could Be Approved If Funding Was Available	FmHA Dollar Amount	Participating Lender Amount
6-1-77	142	107	7,186,500	5,245,800
9-30-77*	123	72	5,275,000	3,260,000
Total	265	179	12,461,500	8,505,800

*Projected demand as of 6-1-77

Eligibility Requirements:

a. The borrower must be of good character, be organized for profit, be able to show reasonable assurance of ability to repay the loan from the profits of the business, be unable to obtain credit from nonfederal sources, and have an annual gross income of less than $275,000.

b. The borrower need not be a citizen of the U.S. and can be organized as a proprietorship, partnership, or corporation.

Application Procedure:

a. Established businesses:

   (1) Prepare a current financial statement (excluding personal items).

   (2) Prepare an income statement from the previous and current years.

   (3) Prepare a personal financial statement for each owner.

   (4) List collateral for the loan, giving appraised or estimated value.

   (5) State amount of loan requested and purpose for loan.

   (6) Contact a bank and request a direct loan; if refused, request an SBA guaranteed loan or a participation loan.

b. In addition to 3, 4, and 6 above, new businesses must:

   (1) Describe the business in detail.

   (2) Describe experience and management capabilities.

   (3) Prepare an estimate of how much equity the owners have to invest in the business and how much will have to be borrowed.

   (4) Prepare a detailed projection of the first year's earnings.

Evaluation:

A representative of the farm-loan section of SBA stated that the demand for SBA agricultural loans is very low. Different sources have attributed this lack of demand to informational problems and the reluctance of participating bankers to service the loan requests. An SBA representative indicated that, if the number of acceptable applications for farm loans were to increase, SBA could increase the number of loans made, since small business operators are not given any preference over small farmers.

SBA has no figures on how many farm loans have been made, since the program is still in its early stages. It is currently preparing a projection of estimated farm-loan volume.

4. California Job Creation Program (Cal-Jobs)

Background:

Cal-Jobs has been providing financial and technical assistance to small businesses since 1968, and it plans to expand its program to include small farmers. While it has not defined this program, nor has it formulated loan projections, it anticipates that the farm-loan framework will be very similar to the current business-loan program.

An administrator stated that most of the loans will be of the participation variety, with Cal-Jobs providing a 100% guaranteed subordinated loan equal to 15% of the firm's total capital needs and the owner responsible for 5% of the amount needed. This 5% equity requirement can be waived in certain instances. The subordinated loan will help to qualify the farmer for an SBA loan or some other type of participation loan.

It is not known at this time how much technical assistance will be provided to the farmer. Cal-Jobs provides small businesses with management and technical assistance and also helps in the preparation of loan requests. Cal-Jobs prefers to make expansion and "buy out" loans, since they carry less risk than start-up loans. It also will only make loans to borrowers that cannot obtain capital from the other available lenders without Cal-Jobs' assistance, i.e., "non-bankable" loans.

5. Cal-Vet

Background:

Cal-Vet makes loans under the Veterans' Farm and Home Purchase Act of 1974. Loans are authorized up to a maximum of $43,000 for a home and $120,000 for a farm. It currently makes only direct loans, but would consider participation contracts if adequate funding were not available from the sale of General Obligation Bonds. Interest rates are 6-1/4%.

Eligibility Requirements:

Loan requirements are rather complex, but essentially a qualifying candidate must be a California resident and have been on active duty during a war period. When loan funds are in short supply, a three-tiered preference system may be instituted to ration loans to veterans.[1]

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[1] See Cal-Vet Loans for California Veterans, October 1977, for specific details.

Evaluation:

A representative at Cal-Vet stated that relatively few farm loans are made. The reasons for this are threefold:

a. Loans are made only on farms that are self-supporting, so the maximum loan of $120,000 is insufficient for the purchase of eligible farm properties.

b. Cal-Vet will accept secondary financing only if the applicant has 10% of the purchase price.

c. Cal-Vet does not currently engage in participation loan contracts.

Because of this, the representative stated that the majority of Cal-Vet's farm loans are to finance the transfer of farms from parents to children, when the sale price is considerably less than the market price. As Cal-Vet now stands, it is of limited applicability as a source of financing for small farmers.

6. Commercial Banks

Background:

The main identifying characteristic of commercial banks is that they are regulated by state and federal agencies regarding the size of loans allowed, loan to deposit ratios, and the amount of security required as collateral for a loan. Like the Cooperative Farm Credit System, banks are a very important source of capital to the farming sector, particularly in the short to intermediate-term areas (see Tables 3-6).

Evaluation:

We conducted a mail survey of major California banks, asking for information on loans, broken down by income class of borrower. Based upon a partial sample of production loans, it appears that the banks' loan profile tends to favor the large borrower more than Production Credit Associations or the Federal Land Bank. While banks do make loans to small farmers, the bulk of their loans go to larger borrowers.

We also requested information on loan rejections and reasons for rejection. The main reasons given for rejections were lack of sufficient capital, lack of a secondary source of repayment in the event of crop failure, inexperienced or potentially weak managerial talent, and a poor credit history.

The loan requirements of banks are very similar to those of the Farm Credit System; most loans are made to established, stable businesses. Because of regulations and the risks involved, banks are usually reluctant to provide start-up funds to new or low-equity farmers.

7. Insurance Companies

Background:

Insurance companies have traditionally been an important source of long-term real estate loans (due to the term structure of their liabilities). They generally will only make first mortgage loans and are regulated by government agencies regarding percentage of assets tied up in farm mortgages. Loans may be made on 70% to 75% of appraised value. Insurance companies have usually concentrated their loans on farms of greater than average size.[1]

8. Leasing

Background:

Leasing is a common alternative to the purchase of farm land in California. The 1969 Census of Agriculture (see Table 11) shows that 12.6% of the farmers in California are tenants, and they farm 17.6% of the land. Another 18.4% of the farmers (who operate another 57.1% of the land) are part-owners who lease a certain portion of their land. A USDA study found that 63% of all agricultural land in California is leased.[2]

Advantages of Leasing:

a. Leasing makes land available to many farmers who are unable to purchase land, as the equity requirements of leasing are much lower than they are for buying.

b. Leasing releases capital that may be used to finance the other operations of the farm.

Disadvantages of Leasing:

a. If the term of the lease is too short, lenders will be reluctant to make intermediate and long-term loans to the lessee, and the lessee will have less incentive to make capital improvements on the land. Short-term leases also tend to inhibit stability, long-range business planning, and career development.

b. Leases tend to be more expensive in the long run than buying, as the lessee must fully compensate the lessor for all interest and tax expenses associated with the land, while the lessee does not share in the capital gains associated with ownership and hence cannot achieve an equity position.

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[1] Oklahoma State University, Agricultural Experiment Station, An Assessment of Alternative Credit Sources for Low Resource, Beginning Farmers, 1976.

[2] Reed and Snyder, What You Should Know About Farm Leases, USDA.

TABLE 11

FARM TENURE IN CALIFORNIA

		1969	%	1964	%	1959	%
I.	Full Owner						
	a. Number	53727	69%	53218	67.6%	68492	70.6%
	b. Acres	9048736	25.3%	7595151	24.4%	9451092	29.0%
II.	Part Owner						
	a. Number	14361	18.4%	15818	20.1%	17141	17.7%
	b. Acres	20386553	57.1%	18812834	60.5%	18991498	58.3%
III.	Tenants						
	a. Number	9787	12.6%	9667	12.3%	11408	11.8%
	b. Acres	6287059	17.6%	4669612	15.0%	4136771	12.7%

*Source - Census of Agriculture

c. Large-scale leasing perpetuates a land tenure system of absentee ownership and the negative consequences associated with it.

Evaluation:

Leasing is an important source of financing for small farmers who do not have the equity base to purchase land and equipment. However, the lessee should demand fair terms, including sufficient duration to guarantee a stable operation. Unfortunately, the lessee is not always aware of the options at his disposal.

9. Merchants and Dealers

Background:

Merchants and dealers provide an important share of nonreal estate financing for farmers (both short and intermediate term). While data are not reported on a statewide basis, national information is available from the Census of Agriculture (see Table 12). As the table demonstrates, the importance of merchants' and dealers' credit, expressed as a percentage of total debt, has been declining over time (23% in 1961 and 14% in 1971). This debt is made up of several components, as shown in Table 13. While the causes for this decline are not readily ascertained, it is speculated that PCA loans have supplanted many of the merchant and dealer loans because of generally lower rates and the decreased need of dealers to stimulate sales through the provision of credit (due to increasing demand for farm inputs).

Eligibility Requirements:

Loan, interest rate, and eligibility information are hard to determine because of the heterogeneous nature of individuals and firms in this category; terms and rates vary from dealer to dealer.

Evaluation:

Dealer credit is probably more important for the small, low-equity farmer with few borrowing alternatives than for the larger farmer with greater access to capital markets. In a survey of small farmers conducted by the Marketing Task Force, only 9% of those who had borrowed to purchase machinery and equipment had financed it using a dealer loan. This survey cannot be used to draw general inferences about the use of dealer credit in California, however, since it was applied almost exclusively to small, specialty-crop growers and is therefore not a random sample.

10. Individuals and Others

Background:

This category is mainly composed of individuals who provide financing for the purchase by others of farm land they own, i.e., long-term real

TABLE 12

Loans of Individuals and Others, and of Major Institutional Lenders, as Reported in Three Census Surveys

Loan type and lender	Survey date of: 1/			Percent of survey total		
	January 1961	June 1966	January 1971	1961	1966	1971
	- - Million dollars - - -			- - Percent - -		
Total debt...........	19,896	39,248	39,786	--	--	--
Nonreal estate.......	6,810	11,949	14,283	100	100	100
Major institutional lenders, total 2/...	3,871	7,404	11,028	57	62	77
Commercial & savings banks........	2,567	4,437	6,391	38	37	45
Production credit association.......	1,145	2,298	4,199	17	19	29
Farmers Home Administration....	159	669	438	2	6	3
Individuals & others, total...............	2,939	4,545	3,255	43	38	23
Merchants & dealers	1,592	2,369	1,941	23	20	14
Other individuals..	723	798	447	11	7	3
Other lending institutions......	314	741	533	5	6	4
Insurance companies	175	290	229	3	2	1
Miscellaneous......	135	347	105	1	3	1
Real estate 3/.......	13,086	23,990	25,503	100	100	100
Major institutional lenders.............	8,209	15,258	16,391	63	64	64
Individuals & others	4,877	8,732	9,112	37	36	36

1/ The surveys were conducted over a period of several months. These dates are approximate. Only in 1971 were respondents asked to report their indebtedness as of a certain date (Jan. 1, 1971).

2/ In this listing, loans to other financial institutions of the Federal Intermediate Credit Banks are not included since such loans could not be identified in the Census categories. Respondents probably would have included such loans in the group "other lending institutions."

3/ Since this report is concerned with nonreal estate debt the various lender groupings are not shown.

Source: Revision of the USDA's Nonreal Estate Farm Debt Series, 1962-75, USDA, ERS - 647, 1977.

TABLE 13

Debt Held by Lender Groups in the Individuals and Others Category, 1961, 1966, and 1971 Census Surveys

Lender group and loan purpose	1961 1/	1966 2/	1971 3/	1961	1966	1971
	- - Million dollars - -			- - Percent of total -		
Merchants and dealers ers, total 4/.......	1,592	2,369	1,941	54	52	60
Lending institutions, NEC 5/..............	314	741	533	11	16	16
Insurance companies.	176	290	229	6	6	7
Individuals, NEC 6/..	723	798	447	25	18	14
Miscellaneous........	135	347	103	5	8	3
I & O, total.........	2,939	4,545	3,253	100	100	100
Merchants and dealers by product line 4/						
Tractors and farm machinery..........	565	836	711	35	35	37
Automobiles and trucks............	206	440	237	13	19	12
Gas, oil, and other fuel for farm business...........	141	131	125	9	6	6
Feed, seed, and fertilizer.........	300	493	401	19	21	21
Livestock and poultry............	252	247	356	16	10	18
Supplies, custom work, and other expenses for farm business...........	129	115	111	8	5	6
Household(1966).....	--	107	--	--	5	--
Merchants and dealers, total..........	1,592	2,369	1,941	100	100	100

1/ U.S. Bureau of the Census. *U.S. Census of Agriculture, 1959. Vol. V. Special Reports, Part 5, 1960 Sample Survey of Agriculture*; U.S. Government Printing Office, 1962.

2/ U.S. Bureau of the Census. *U.S. Census of Agriculture, 1964, Vol. III, Special Reports, Part 4, Farm Debt*; U.S. Government Printing Office, 1968.

3/ U.S. Bureau of the Census. *U.S. Census of Agriculture, 1969, Vol. 5, Special Reports Part 2, Farm Finance*. U.S. Government Printing Office, 1974.

4/ All merchant and dealer debt included here and in other tables is classified as nonreal estate debt, while in the Census reports part of it was reported as secured by farm real estate.

5/ Institutions elsewhere classified are commercial and savings banks, PCA's, FmHA, and nonreal estate loans of life insurance companies.

6/ Individuals elsewhere classified are only individuals granting mortage loans (or land contract loans) in connection with the sale of farmland.

Source: Revision of the USDA's Nonreal Estate Farm Debt Series, 1962-75, USDA, ERS - 647, 1977.

estate debt. Since these data are not reported to the public, information concerning terms and requirements cannot be obtained. A survey could provide some information, but it is posited that the market is imperfect, i.e., rates and terms vary from lender to lender.

11. Alternative Credit Sources

Background:

In addition to the institutional lenders already mentioned, there are several alternative sources of funds that mainly apply to small beginning farmers. These may be divided into governmental and private sources.

a. Governmental Sources:

(1) Economic Development Administration

While EDA does not make direct farm loans, it makes loans to farm-related enterprises.

(2) Office of Minority Business Enterprise, Community Services Administration, Department of Labor

This organization is reported to provide some funds to help finance farms.[1]

b. Private Sources:

(1) Community Development Corporations (CDCs)

These are nonprofit, community-based corporations organized to benefit low-income urban and rural residents. Their methods of operation and clientele vary from group to group, but in general the rurally-based CDCs provide technical, legal, and financial assistance to small farmers, cooperatives, and rural development projects in accordance with locally defined needs.

(2) Business Investment Development Corporations (BIDCOs)

BIDCOs are a relatively new idea in farm financing. Basically, they are nonprofit corporations, funded by member institutions (banks, savings and loan associations, the State of California, etc.) and are organized to promote economic development by spreading loan risk among lenders. They are eligible to receive funds from SBA or to participate with it on joint loans and may soon be able to receive a 90% loan guarantee from the federal government. In the latter case, the guaranteed portion of the loan may be discounted on the money market to provide the BIDCO with increased operating capital. While the concept is still too new to evaluate, it has the potential to channel funds into the "non-bankable" areas of farm financing, i.e., the small, low-equity farmer.

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[1] See Pelzer and Matze, op. cit.

CONCLUSIONS

From our study of the farm-finance system in California, we have reached the following conclusions:

1. The gaps in availability of funds are more a function of the equity and experience of a farmer than the size of the farm; there appears to be adequate funding for the established and experienced small farmer. The shortage of funds exists for the low-equity farmer and the beginning farmer.

2. Beginning farmers can be divided into two groups:

   a. those who cannot obtain financing because they are judged unable to run a successful farm enterprise, and

   b. those who have the requisite skills to run a successful farm (or have access to a good technical consulting group) but cannot obtain loans because of a lack of sufficient collateral.

   Our efforts should be directed toward the second group, those who have the potential to succeed in farming, but are denied access because of lack of funds.

3. FmHA and the groups described in the Alternative Credit Sources section of this report are designed to aid the low-equity and beginning farmer through lowered loan requirements and subsidized interest rates. The information we have concerning excess loan demand at FmHA indicates that this area is underfinanced.

If it is deemed socially desirable to support the entry of people into the small-farm sector, our efforts should be concerned mainly with exploring alternative means of providing funds to the potentially successful low-equity and beginning farmer.

IV. FINANCE TASK FORCE RECOMMENDATIONS

The financing problems faced by the small farmer (see Section II, Needs Statement) are varied enough to warrant separate consideration. Some problems may be alleviated through policy changes in or increased funding of existing institutions. Others will require the creation of new financial and technical-assistance organizations.

In preparing to formulate its recommendations, the Finance Task Force examined several models for farm and developmental finance. Some can be eliminated from consideration because they are inapplicable to the California situation. The models that received the most support or discussion are summarized below. They were used as guides in considering possible rural financing models for California. The goal of the different models is to channel funds into areas of agriculture that currently experience capital shortages.

MODEL SUMMARIES

1. California State Bank

The idea of a California State Bank is currently being studied by Senator John Dunlap's Senate Select Committee on Investment Priorities and Objectives. The bank is still in the early planning stages, so it is too soon to comment about design or specific policies.

The general policy of the bank would be to use "public funds for public purposes." The bank could serve as an intermediary organization to channel surplus state funds and pension fund investments to local development projects and other "highly desirable private enterprises," including small businesses and small farmers.

2. State Community Development Finance Corporation

a. A state CDFC would be organized to use public funds to supplement the capital available to Community Development Corporations (CDCs). The State of Massachusetts recently passed legislation establishing a CDFC.

   (1) The Massachusetts CDFC will provide capital to CDCs through equity investment (purchase of stock), loans, guarantees of private loans, and the creation of a secondary capital market (for the sale and purchase of development organization stocks). The CDFC will be financed through the sale of $10 million in stock to the state.

   (2) The Massachusetts model has been criticized on several counts:

      (a) The CDFC does not take advantage of existing public and private development funds and therefore does not maximize the impact of the program.

      (b) The program tends to make CDCs dependent on the state for funding, a situation that can lead to interference with their management.

      (c) The CDFC does not actively search out business opportunities for CDCs or act as a liaison between CDCs and private institutions.

b. With the above exceptions, the Massachusetts CDFC model is regarded as a politically feasible solution to many of the problems faced by CDCs.

3. Inter-American Foundation

a. The Inter-American Foundation is a U.S. public corporation chartered to support development activities in the Western Hemisphere. It is autonomous from the U.S. Government, though it is subject to Congressional oversight. The IAF was funded through a $50 million, multi-year Congressional appropriation. It has a policy of minimal interference in the projects it funds: it does not participate in project design or implementation and does not provide technical assistance. Its purpose is to provide grants to private Caribbean, Central and South American organizations that are outside the mainstream of the U.S. international lending programs.

b. Method of Operation

(1) The IAF only makes grants, either for one-time, finite purposes or for income generation or revolving loan funds to help establish self-sufficiency.

(2) Since beginning operations five years ago, the IAF has made over $40 million in grants. This amount has been matched with $22 million from the grantees and $22 million from other contributors. The Foundation has found that the greatest gap between needs and existing resources involves front-end money to get projects organized and started.

(3) While the IAF prefers to make direct loans to community groups, the majority of its grants are made to intermediary organizations in the grantee country.

c. A California model based upon the principles of the IAF is seen as a provider of subsidized interest loans to high-risk farmers that do not have access to the existing credit market. The organization would also provide grant money for technical assistance and training as a supplement to other public and private training programs.

4. Business Investment Development Corporations (BIDCOs)

A BIDCO is a Small Business Administration licensee which has the authority to make equity investments and loans to qualifying enterprises, request SBA guarantees, participate in loans with SBA and other lenders, borrow directly from the SBA, and make use of other federal loan and guarantee programs.

A bill recently passed by the California Senate (SB 40) will expand the usefulness of BIDCOs as farm financing vehicles by liberalizing membership (investor) requirements.

BIDCOs help provide capital to firms that have the requisite managerial knowledge to run a business but lack sufficient equity to qualify for bank loans. Depending on its charter, a BIDCO can provide managerial and financial consulting on a fee basis.

The most important characteristics of BIDCOs are their ability to leverage funds and to pool risks among their member investors.

5. Southern Cooperative Development Fund

The Southern Cooperative Development Fund was organized to provide economic and technical assistance to poor rural minority cooperatives that are not well enough established to be served by commercial and governmental lending agencies. The goal of SCDF is to help cooperatives reach the point where they can rely solely on market sources of financing.

The fund is capitalized through direct federal and private grants, as well as loans and equity investments from the SBA. Members (loan recipients) purchase voting stock in the SCDF, in a system similar to that used by the Cooperative Farm Credit System.

6. Pension Fund Financing

Pension funds can be used in different ways: to help finance BIDCOs (risk pooling), to purchase guaranteed loans, or to help capitalize a state bank. In Kansas, for example, they are used to purchase the guaranteed portion of SBA loans. Care must be taken, of course, to ensure an adequate rate of return and security of principal.

POSSIBLE PARAMETERS OF A CALIFORNIA FARM FINANCE ORGANIZATION

In considering the creation of a farm-finance entity in California, the following factors should be considered:

Dollar Amount

Pinpointing the amount of money that will be needed to finance low-resource and beginning family farmers in California is extremely difficult. One formula would be to estimate the net acreage going out of small-farm operations and being incorporated into larger than family-size units. Then an estimate could be made of the overall capital cost and feasibility of keeping an average acre in small-farm operations. Multiplying the two would give a dollar estimate of annual financing required. This does not take into consideration, however, potential new family-farm acreage which may open up in Westlands and other federal water districts. Futher complications result from considerations such as financial leveraging and guarantees of existing dollar sources; the subsidy vs. loan issue; the cost of outreach, technical assistance, education; and the administration of such a program or series of programs.

A more practical and immediate solution would be to examine the most limiting constraint identified by the Task Force: speed of implementation. Because the program will break new ground, a dedicated, gradually expanded effort probably will get better results than a sudden flash in the pan. Using this constraint, it would be appropriate to capitalize the first year's operations at about $10 million. Without leveraging, this would mean 50 farms in the $200,000 range. Other costs involved in the start-up of the program might require an additional 10%, or $1 million. The second-year budget for new loans could be in the $25 million range, with the overhead increasing less than proportionately. Loan repayments would additionally increase the loan pool. A $25 million loan pool would provide for about 125 adequately capitalized small farms. However, as leveraging techniques were put to use, this could be multiplied by an average of four, resulting in 500 new small farms per year.

It should be emphasized that these figures are gross estimates related to the speed of implementation of a proposed program. The actual need is not estimated to be less, but rather is anticipated to be far in excess of the amounts stated here.

Multiple-Cost Centers

Because of a variety of functions that need to be performed peripheral to the actual financing of small farmers, the structure of a proposed farm-finance program should be segmented into cost centers. The financial institution itself would be the major cost center, geared to a profitable operation. Other cost centers could be a high-risk or subsidized lender, an outreach and in-processing component, and an education component. With these divisions, the core financial institution would be protected from the confusion that often tags such institutions as charitable or concessionary lenders that "do not really expect" loan repayment.

Outline of Functional Systems

The following functions and decision areas are typical of financial models in general:

1. Proposal Development
    - a. Outreach
    - b. In-processing
    - c. Outside lender involvement
2. Portfolio Management and Priorities
    - a. Profits
    - b. Geography
    - c. Operation Size
    - d. Experience Requirement
    - e. Secondary Sources of Repayment

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3. Monitoring Impact

    a. Social
    b. Economic
    c. Environmental
    d. Self-evaluation

4. Operating Assistance

    a. Training on farm
    b. Training in classroom
    c. Agricultural Stepladder
    d. Who, what, and how of providing operating assistance

5. Management and Control

    a. Umbrella structure
    b. Cost Centers
    c. Nonprofit vs. Profit
    d. State Authorized vs. Private

In terms of the above, a number of functions for a California small-farm financing institution can be discerned:

1. Outreach

    It is extremely important that a small-farm financing institution be highly visible and easily accessible.

2. In-processing

    In-processing must be geared to the target clientele (for example, it should have a multi-lingual capacity). This can probably best be achieved by contracting with existing farm-assistance organizations.

3. Outside Capital

    Leveraging and outside guarantees are essential to obtaining adequate resources. The financing institution should be a vehicle for SBA and FmHA participation and should also be suitable for State Treasury deposits and private and public investment. The enterprises financed by the institution should be viable enough to attract the participation of lenders, notably SBA licensees such as Small Business Investment Companies (SBICs), Local Development Corporations (LDCs), and BIDCOs. The institution should be structured to permit joint activities with such lenders, including loans for relending.

4. Profits

    Since the objective of a viable financial institution would be long-term service to the clientele, the institution itself should be geared to a modest profit level. If incentives were provided, such as sliding interest or loan-repayment schedules or high-risk loans made on the contingency of the applicant's participating in a training or stepladder program, these functions could best be performed by a subsidiary with renewable funding.

5. Geography

Target geographic areas should be established where a large potential clientele exists.

6. Clientele

The institution should be geared to handle both cooperatives and individual farmers.

7. Experience

A stepladder approach is highly desirable for less experienced farmers. Such an approach would include increasing loan size based on a combination of success and education, management assistance contracts, on-site and classroom training, cooperative membership, and a transition from lease to ownership of land over a period of years. The greater the success, the more rapid the advancement up the ladder.

8. Secondary repayment

A key requirement is a degree of financial participation by the borrower. The borrower should never be in a position of having "nothing to lose."

9. Goals

The institution should have clearly defined goals and should be monitored to assure that it does not lose focus as it matures, as so many assistance programs in farming have done. Safeguards should be established to prevent redefining goals to accommodate "more workable" client groups.

10. Technical assistance

The financing program should be designed to fill gaps, not to replace or compete with services already existing. Training, technical assistance, and research are vital and probably can best be provided on contract by outside groups.

11. Control

Safeguards should be built into the institution from the outset to prevent it from falling into the hands of interest groups within the target clientele that are inconsistent with the aims of the organization. The best control appears to be that of a quasi-public institution with state as well as private participation.

FINAL RECOMMENDATIONS OF THE FINANCE TASK FORCE

The Finance Task Force has developed several recommendations to help increase the viability of small farms in California. They range from the creation of a Rural Development Office under the auspices of the state goverment to policy recommendations for existing institutions.

1. Rural Development Office

The Task Force recognizes the need to create a state-funded office with a high degree of autonomy to coordinate and implement the programs recommended by the Small Farm Viability Planning Project and to continue research to enhance the viability of small farmers.

As envisioned, this "Rural Development Office" (RDO) will be composed of a small staff with an advisory board. Its functions will be to serve as a public advocate for small farmers and to disseminate information about programs designed to aid the target group (see Section II, Needs Statement). It will not have the capacity to implement programs, but will conduct studies, write legislation, and coordinate small-farmer programs when they are enacted.

This "umbrella" office could be concerned with financing, marketing, technical assistance, etc. It could be created through legislation, by an act of the governor, or even set up as a nonprofit corporation. Creation by administrative act is probably the fastest of the three methods. The nonprofit corporation would have the highest degree of autonomy but might not have the necessary influence to cause legislation to be enacted.

2. State-Level Financing Model

Once the Rural Development Office (RDO) is staffed and funded, it should undertake a six-to-nine-month study to:

a. conduct a thorough review of existing financial models and legislation;

b. identify sources of capital: county, state, federal, and private; and

c. determine legislative requirements and draft legislation to create the financing vehicle.

Over the following one-to-two years it should develop an operational strategy for its financial organization that will serve the needs of small farmers.

The Task Force designed a comprehensive financing model, based upon several of the models studied, that could serve as a prototype for the model to be developed ultimately by the Rural Development Office. The Task Force's proposed model (see Figure 1) would be operated through a Central Financial Office (CFO). This could be set up on a profit, nonprofit, public, or quasi-public basis. The Office would have the authority to make direct loans, but in general would work through other lenders and organizations. It is important that the Office maximize the use of existing financing programs in order to increase the impact of its own funds.

The CFO would have two branch organizations: a financial assistance corporation and a technical assistance office. The financial assistance corporation could be set up as a private or quasi-public, nonprofit corporation that would use state and foundation money to make grants and subsidized loans to farmers who could not be reached through the main lending channels. The technical assistance office could be run in a manner similar to the Cal-Jobs technical assistance program: the state could contract with private parties to provide management and financial planning assistance to clients.

The main financing channels would be through the state, FmHA and SBA licensees, conventional lenders, and other lenders. Through the use of loans and guarantees to these intermediaries, the CFO would influence the types of financing they provided. For example (see Figure 2), the CFO could work with an existing SBA-licensed Small Business Investment Company (SBIC). In the example, the SBIC obtains two-to-one leveraging from SBA, increasing $500,000 in private capital to a $1.5 million loan pool. The CFO agrees with the SBIC to provide four-to-one leveraging if the SBIC will put up $250,000 of its own capital and use the resulting $1,250,000 to make loans to small farmers. In this case the SBIC increases its loan pool to $2.5 million and the CFO has channeled $1 million in state money and $250,000 in private capital to the small-farm sector.[1]

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[1] An important function of the CFO would be its ability to leverage private and other capital. To clarify this concept, a short definition follows.

In traditional financial management, leveraging occurs when a firm combines debt capital with its equity capital to increase the total money available to finance operations. If a firm receives two dollars of debt for every dollar of its equity capital, it has received two-to-one leveraging. The greater the leverage ratio, the greater the amount of capital a firm can mobilize with a given equity base.

There is also a negative side to leveraging: the greater the ratio of debt to equity in a firm's capital structure, the greater the risk of default because of the higher fixed interest charges. For this reason, the proposed CFO would have to establish a reasonable interest scale for its highly leveraged clients.

In the Task Force's model, leveraging would occur on several levels. First, the CFO would provide leveraging to licensees such as SBICs, Minority Enterprise Small Business Investment Companies (MESBICs), etc., to increase their loan pools ("private" equity capital plus low-interest loans). Second, these licensees would in turn supply leveraging (in the form of loans) to farmers, allowing them to expand their total capital (equity plus debt) to the point where they could run a successful agricultural operation.

The CFO would have the authority to use state money to leverage private capital, provide guarantees to lenders making loans to small farmers, or make subordinated loans (as Cal-Jobs does) to provide front-end money. Its goal would be to provide the needed inducement to attract other capital to the small farmer.

The qualifying SBA licensees are LDCs, SBICs, MESBICs, and BIDCOs. Currently FmHA does not have licensees, but the Task Force recommends that FmHA adopt a program similar to SBA's, at least including the LDC concept. The Task Force sees this as a method for FmHA to provide better service to its clientele without increasing its overhead. The licensee could also provide the technical assistance and supervised credit that FmHA cannot currently provide (due to staffing limitations).

State licensees would be set up by the CFO in a manner similar to the regional licensees of Cal-Jobs. They would be designed to fill gaps in the existing system, i.e., in areas not already served by SBICs and others.

Qualifying loan recipients of the CFO system would include beginning and existing small farmers, production and other types of cooperatives, CDCs, and CDC projects. All borrowers would have to be unable to secure loans through conventional financing channels under terms which permitted realization of the potential economic viability of their farms.

While the above model is presented only as a guideline to be used by the RDO in designing a comprehensive financing model (or models), the Task Force believes that it would go a long way toward solving the current financial problems of the small farmer.

3. Policy Recommendations for Existing Institutions

a. FmHA and SBA

(1) Both organizations should recognize cooperatives and members of cooperatives as eligible borrowers.

(2) A joint program should be set up whereby FmHA could issue guarantees to cover purchase of farm land and SBA could guarantee loans made for operating capital.

b. FmHA

(1) FmHA should adopt budgeting procedures for guaranteed loans like those of SBA; instead of holding the entire amount of the guarantee in reserve against default, it should retain only the expected loss from bad debts. This would substantially increase the volume of loans that FmHA could make within a given budget.

(2) FmHA has a substantial backlog (approximately 2-1/2 years) of Farm Ownership Loans, for the above reason and also due to budgetary constraints. Its program should be expanded to meet anticipated demand, either through a reduced reserve requirement or increased funding.

(3) FmHA should be provided with sufficient personnel to provide technical assistance and supervised credit, as it has done in the past.

(4) The Task Force also recommends that FmHA adopt a licensee arrangement, similar to that of SBA, for LDCs, SBICs, etc. By so doing it would lower its personnel requirements and could increase the technical assistance and supervised credit available to farmers by contracting these services to private organizations.

(5) The loan limits on Farm Ownership and Operating Loans should be raised to reflect today's increased costs of farm operation, but not to the point that the FmHA serves primarily medium to large farms rather than the small-farm sector.

c. SBA

SBA should increase the availability of people to provide technical assistance and supervised credit for its new farm-loan program.

4. Land Policy Recommendations

A major problem facing the small farmer is the availability of land at a price consonant with its agricultural earning capacity. While there are already many plans regarding the preservation of prime agricultural land, the Task Force wishes to recommend some areas for consideration by the State of California.

a. The State should take an active role in analyzing all implications of Reclamation Law enforcement, e.g., the residency requirement, resale provisions, etc., so as not to discriminate against family farmers.

b. Compensatory measures (purchase of development rights, zoning) should be explored as a means to keep prime agricultural land in farming uses.

c. Application of the Williamson Act to smaller units should be considered.

d. The State should review the legislation of other states (Minnesota, North Dakota) regarding corporate ownership of land and consider adopting similar controls.

e. The State should facilitate the granting of long-term leases of public land to small farmers.

5. Tax Policy Recommendations

Speculative and tax shelter demand for agricultural land has helped to increase its price above its use value in farming. Most of the tax-shelter benefits of holding agricultural land were eliminated by the Tax Reform Act of 1976.

The main tax policy affecting the price of farm land is the tax preference on income derived from capital gains. This induces investors to purchase farm land (and other land) in the expectation of capital appreciation. Since this tax break helps to bid up the price of agricultural land and since it does not benefit the individual farmer except upon sale of the land, the Task Force believes that the use of the preference rate on capital gains should be restricted. This could be done by increasing the mandatory holding period beyond the current one year or by eliminating use of the long-term capital-gains tax preference on agricultural land.

FIGURE 1

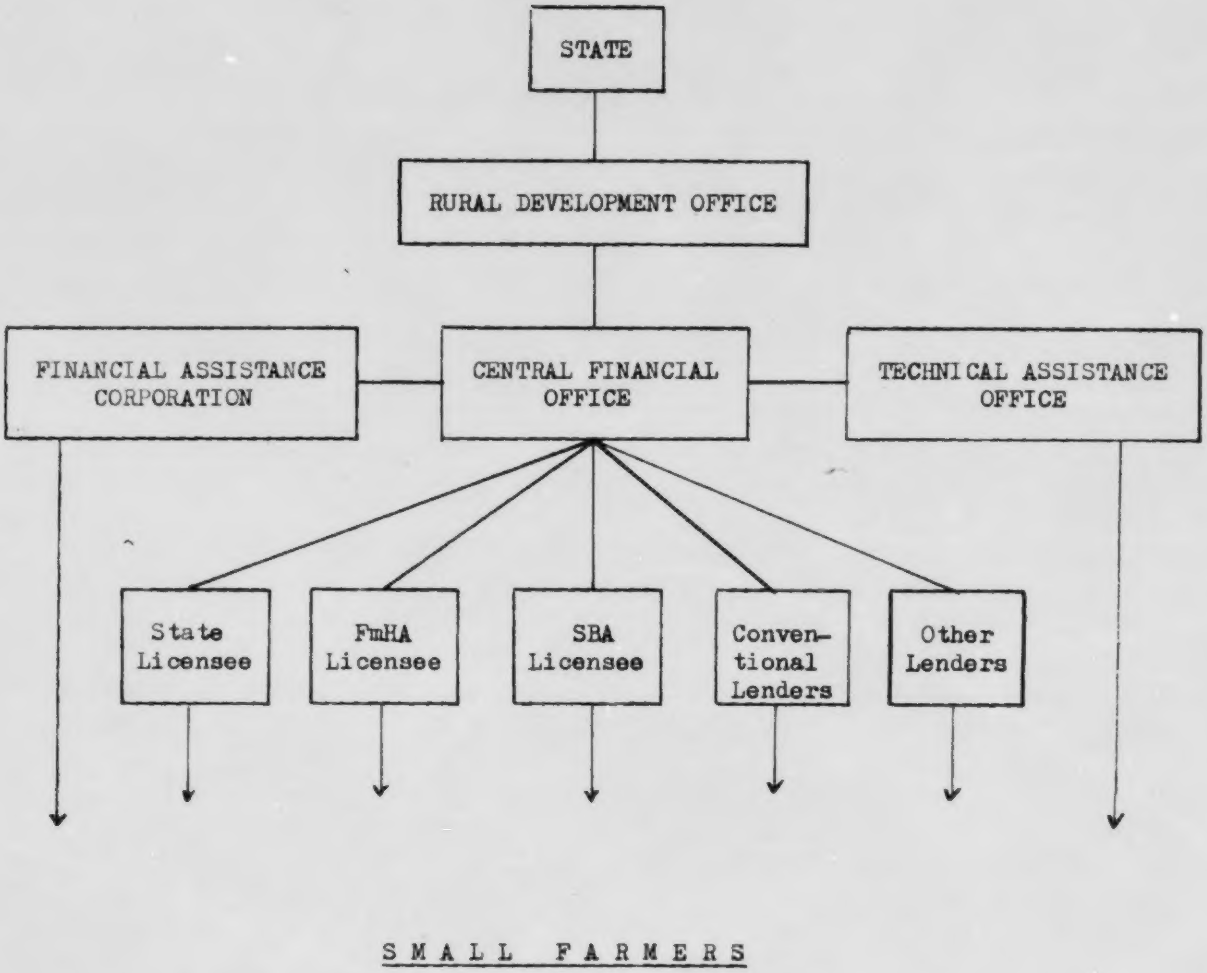
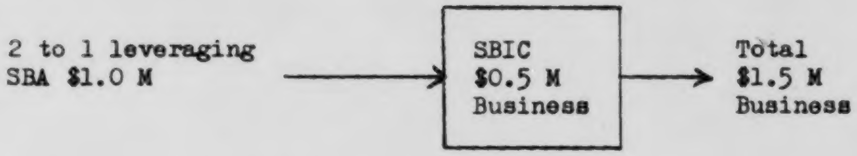

STATE
RURAL DEVELOPMENT OFFICE
FINANCIAL ASSISTANCE CORPORATION
CENTRAL FINANCIAL OFFICE
TECHNICAL ASSISTANCE OFFICE
State Licensee
FmHA Licensee
SBA Licensee
Conventional Lenders
Other Lenders
SMALL FARMERS

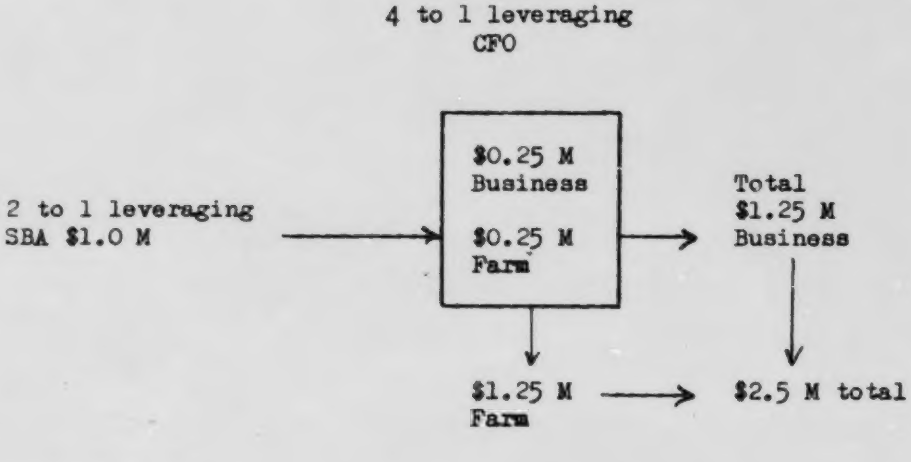
FIGURE 2

POSSIBLE FINANCING OF FARMS THROUGH EXISTING SBA/SBIC

SBA ONLY



SBA and CFO



COMMENTS BY JOHN A. SHAHABIAN

on the

FINAL REPORT OF THE FINANCE TASK FORCE

That the final report of the Finance Task Force does not contribute an understanding of what constitutes viability-level finance in farming must be viewed as a substantive failure of the effort. It is not that the report tries and fails to comprehend financial viability for farmers, but that the relationship of finance to farm viability is never put to test.

Instead, the introduction to the final report sets forth size (operable by a single farmer) and income (enough to support the farm family) objectives in finance. This "profitability-equals-viability" approach subsumes the role of capital in a business enterprise, and, thus, trivializes the basic subject of our report.

While it may be possible to disagree upon what constitutes farm viability in the abstract, it is my experience that financial viability has a certain meaning to investors regardless of the type of business under discussion. The finance question in farming is admittedly complicated by the many barriers to investment and security, including the extraordinary capital intensity of the landowner small farm, the uncertainty of production and the volatility of farm prices. The basic principle that finance is one component of production which is subject to measurement, however, is not altered by these adversities. It is possible, and thus necessary, to chart that role and its relation to successful operation in farming.

This recognition of the specific role of capital admits that the small farm may have a larger problem than lack of access to capital markets and sources. Access may mean nothing if limited to too little capital to make a successful farming operation, or, worse, if examination were to show that because of capital inefficiencies a particular type of small farm could never repay its capital costs.

These questions, I believe, are essential to the relationship of finance to small farm viability. They should have been asked and they should have been answered.

The flaw in approaching the farm finance question from the standpoint of producing "enough income to support the farm family" is that there is no certain relationship between capital investment and profitability. You first must calculate how much capital will produce how much farm product at what average cost. Even this calculation does not reveal profitability, since it is well known that farm prices are among the most unpredictable prices in the economy.

Price uncertainty, in fact, makes the goal of "profitability" an impossible objective to achieve through financing assistance.

The Finance Task Force is guilty of both trying to do too much with and underestimating the tool of financing. No amount of financing will even insure farm profitability, but financing is integral to the viability of a farm.

In searching for an appropriate financing objective for the Task Force to advance, we should return to the economic logic of capital investment. The role of capital in production is a well-researched topic in economics. It's highest use is reflected through the minimizing of the average unit cost of production.

For the purposes of our Task Force we could have kept the requirement that the farm be operable by a single operator (or two-person) farm. Within this constraint, we could have defined "viability-level finance" as (for example), "access to sufficient capital to operate a farming enterprise *within competitive levels of efficiency*". This definition isolates the finance question from the overall problem of small farm viability.

By thus defining the problem we would not have pretended to provide a comprehensive solution to all the problems faced by the small farmer, which was not our job anyway, but we would have supplied a useful examination of the finance component.

In anticipation of the criticism, the above suggested definition is clearly not intended to force all small farmers upon a procrustean bed of "efficiency" in farming. It is known that small farmers are capable of cost savings over the corporate farm model. For example, the small farmer is capable of exploiting the labor of him/herself and his/her family. The small farmer might also be willing to accept a lower rate of return on his/her invested capital.

What no small farmer is capable of doing, however, is to grow rice on a two-acre plot and remain viable. For each crop there exists one or more "mixes" of production technologies (including such things as land, fertilizing, equipment, labor, interest, and profit) which yield results within "competitive levels of efficiency". A small farmer can manipulate these variables, reduce some from the corporate model, eliminate all profit, and remain in business.

It is important, however, that our model not *require* the small farmer to make these sacrifices. In our deliberations we may be a great deal more willing than the struggling farmer to spend another harvest season with an outdated and unreliable combine, to work 18 hours a day for six months, to put the children of the farm to work rather than take advantage of educational opportunities, and so on. All of these "savings" by the small farmer have their human costs.

We might have adopted a finance model for the small farmer which included the goal that farming become a less sacrificial enterprises. Certainly no farming operation which relied upon organized farm labor would be permitted to make these choices/ sacrifices.

What we needed was good data on the capital structure of farm production. We could have specified that the financing be adequate to buy or lease a farm large enough to fully utilize the farmer's mechanized labor, adequate to finance efficiently sized and economical machinery, adequate in terms to keep interest costs affordable (here we could have gauged the need for low-interest, long-term lending), adequate to allow the farmer to work an honest day but still have time to spend with the family, and adequate to generate income to afford decent housing, clothing, food and education for the farm family. The small farmer would have been better served by such a study.

Basically, what our Task Force could have done was investigate how the small farmer, given appropriate access to credit, would have the chance to produce in the mainstream of California agriculture. This is a quite realistic goal given our shared belief that a small farmer can achieve near-minimum unit production costs with adequate financing in most crops.

With the production of the present report, however, this is the road not taken. Our needs section, in my view, fails to identify the substantive capital needs of farmers. That section, instead, places reliance upon the perceived feelings of farmers and financial institutions. Points 7 through 11 of the needs statement, I find, are embarassingly vacauous as statements of finance needs.

The impact of the "profitability" assumption is felt most heavily in our conclusions. The assumption that a viable farmer is a profitable farmer leads to the quite astonishing conclusion that there is no finance problem for the existing small farmer. If this were true, why do so many existing farmers cease to exist in each succeeding year?

We have, in all honesty, not the slightest idea whether or nor existing small farmers have access to adequate financing for viability. We have no idea because we have no viability standard.

In summary, our conclusions are not supported by evidence the Task Force has uncovered. A whole body of small scale agriculture, the existing small farmer, is excluded on faulty assumptions. In a curious way, we seem to have preoccupied our study with the needs of nonfarmers: those supposedly wishing to enter farming. While this is, of course, a legitimate goal for the Task Force, it is just as important if not more so to help save our existing small farmers and end the erosion.

I do share the Task Force recommendations, but not because they flow from authenticated needs. Like the report throughout, I began with the assumption that small farmers needed financing assistance. It is difficult in the end to admit that the report only remakes this assertion, without describing who, how much, what kind, or why this help is needed for small farmers.

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TRAINING TASK FORCE

FINAL REPORT

Small Farm Viability Project

November 1977

ABSTRACT

TRAINING TASK FORCE

Because farming is both a science and a business, the family farmer must have a solid knowledge of production processes, management, and marketing. Once he has acquired this basic knowledge, he is obliged to keep constantly abreast of new developments that affect his productivity and efficiency. To do this, he must know how to make use of all available informational resources, including government agricultural agencies and their publications, public and private educational institutions, and technical assistance provided through businessmen and bankers.

Only for in-school youth, from high school through community college and the university, are training resources to prepare for independent farming adequate. For out-of-school adults who would like to enter farming but need instruction in specific production areas, marketing, or management, and for present low-resource farmers who need to sharpen their skills in order to make their farming operation more profitable, training resources are extremely limited. Community colleges, Regional Occupational Centers and Programs, and private, nonprofit, community-based organizations have the greatest flexibility to serve them, but their financial resources and outreach capacity are inadequate.

For the established family farmer, private-sector resources such as lending institutions and commercial operators are important sources of information. The University of California Cooperative Extension Service should be an equally valuable resource, and it does in fact serve those farmers capable of seeking out its agents. Unfortunately, many small farmers are unaware of the services that the Cooperative Extension Service offers, and very few extension agents have the time to identify and seek out the family farmers in their area.

The Task Force believes that all farmers, from the new entrant with limited experience and incomplete knowledge, to the university graduate who needs little or no assistance in keeping abreast of new developments, should have access to the skills and information they need. This implies a general commitment by the public sector to augment the educational services provided specifically to small farmers by three major entities: the University of California Cooperative Extension Service and agricultural research program, the formal education system, and community-based organizations. Comprehensive, intensive training should be available to the least prepared segment of the family-farmer population, and less intensive, more occasional services to the more advanced family farmer. Adoption of such a family-farmer training policy would require the relaxation or revision of the many regulations that currently restrict the innovative use of public funds for small-farmer training.

Where organized training programs are involved, the Task Force makes the following specific recommendations:

- Training programs must be integrated with financing mechanisms for land and production capital and with marketing programs.

- Training must be conceptualized as a long-term undertaking, of at least two or three years' duration.

- Training programs should be designed to provide a subsistance allowance until the farmer's own cash flow from agricultural production becomes adequate to support his family.

- The allowance or stipend system should be coordinated with the existing welfare payment system toward the end of making more positive use of available welfare funds. A family farmer should not be excluded from training or access to subsistance allowances if his income is above the government determined poverty line or if he has an equity investment in land or equipment. Rather, a flexible system of subsistance allowances should be devised that would supplement each participant family's income to the extent necessary in order to provide a total amount representative of a moderate income. A system could be developed involving private-sector bank loans for participants already making moderate incomes and individually determined allowances for low-income participants.

- Training programs should emphasize the need that small farmers have for cooperative action at all levels, particularly in the area of marketing, if they are to compete with large growers.

- Training programs must have a bilingual capacity for the benefit of the non-English speaker.

- A State policy should be established for the preparation and publication of basic, learner verified instructional materials pertinent to the needs of small farmers and published in the native languages of all significant segments of the small-farmer population.

- Increased use must be made of appropriate instructional hardware, along with appropriate software developed locally.

- Because of the present shortage of trainers capable of relating effectively to the client population, programs must be developed to prepare trainers and give them professional status. Consideration should be given to accredited internships and apprenticeship programs and to more extensive use of the peer training concept.

The Task Force's final recommendation is that a mechanism for information collection and dissemination be established for family farmers, supported by public funds. Equally important is the evolution of networking among providers and consumers of training. The existence of such a network would facilitate the exchange of information and would create a power base for advocacy of family-farmer interests and needs.

FINAL REPORT

TRAINING TASK FORCE

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I. INTRODUCTION

The Training Task Force was composed of nine members representing nearly every type of agricultural training resource in California. Two members were agricultural specialists with the public education system, one with the high school and the other with the community college agricultural education program. One was a Farm Adviser from the university's Cooperative Extension Service, assigned to work specifically with independent small farmers. Five represented private, nonprofit, community-based organizations that specialize in providing services, training, and technical assistance to farmworkers who aspire to independent farm ownership or wish to upgrade and diversify their farm skills. The ninth was a specialist in rural, nonformal education, with emphasis on its application in Latin America. In examining family-farmer training needs and resources and making recommendations (Sections II, III, and IV, respectively, of this document), the Task Force drew on the expertise of its members and on inputs by small farmers themselves.

The Training Task Force defined the potential client group for training in small farming as (1) present family farmers of modest means and/or their children, (2) the agricultural worker (i.e., a farmworker or anyone employed in agriculture-related industries) and/or his children, who desire to own/operate their own farms, and (3) all others who are interested in undertaking farming seriously, not as a hobby.[1] Qualifiers such as rural residence, income level, employment record, ethnicity, etc., can be used further to define the priority target population. Age, however, should not be a factor in determining eligibility; the Task Force felt that training for small farmers should be available to all qualified candidates, from young adults to senior citizens.

After examining the training needs of present or aspiring family farmers (Section II) and the training resources currently available to them (Section III), the Task Force attempted to conceptualize a training approach (Section IV) that would encompass the needs of the entire client group, from the least prepared to the agricultural school graduate. It was felt that a long-term, comprehensive program that would satisfy the requirements of the "most rigorous case", e.g., the poorly educated farmworker, monolingual in Spanish, culturally isolated, first generation in the United States, on welfare all or part of the year, but experienced in crop production and desirous of becoming an independent small farmer, would also meet the needs of all others in the target population.

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[1] The small farmer is not the only potential recipient of educational inputs. Agricultural officers of banks and other lending institutions frequently have only a cursory knowledge of agriculture; they need to be made aware of the entire scope of the agricultural industry and its built-in risks. Office personnel in agri-business firms might also be more effective workers if they had a broader knowledge of agriculture along with their business or administrative skills. Finally, the public as a whole needs to be convinced of the viability and social desirability of the family farm if community interest and support are to be mobilized. The Task Force, however, did not attempt to deal with educational programs for these people but confined its work to the needs of present or potential small farmers.

The model would attempt to integrate the services of all available resources, i.e., the formal education system (high schools adult evening schools, community colleges, state universities, and universities), nonformal adjuncts to the formal education system (Regional Occupational Programs and Centers and community-college special courses), private, community-based organizations, the University of California Cooperative Extension Service and agricultural research program, and public and private entities that provide information and services on request (e.g., the Soil Conservation Service, agricultural supply houses). The small farmer would be able to enter the system at the point most appropriate for him, given his educational background and experience, and to choose the types of programs that best fit his needs as he progressed toward greater expertise: general training, specific training on a given subject, follow-up technical assistance, or simply access to a structured information dissemination system.

II. TRAINING NEEDS OF THE FAMILY FARMER

Training can be defined as the design and transmission of information in such a way that behavioral change results on the part of the recipient. The training format, whether formal, nonformal, or informal, should be appropriate to the client group; major determining factors are ethnic or cultural background and educational level: while some individuals may respond favorably to a traditional classroom situation, others may require a realistic field experience.

Because farming today is both a science and a business, it is imperative that the small farmer have access to current information on agricultural technology, farm management, and marketing. Without this information, it is almost impossible for his farming unit to compete successfully within the existing economic system and bring in profit sufficient to maintain his family at a satisfactory level. Instructional programs should be organized in such a way that farmers can enter at a level appropriate to their individual development and can selectively choose educational experiences of immediate value and interest to them. Follow-up technical assistance is also a necessity, as are mechanisms such as organized information-dissemination systems to permit the farmer continually to keep abreast of new developments.

The Task Force attempted to analyze the training needs of family farmers and aspiring family farmers from two points of view: larger societal issues on the one hand, and specific skill requirements on the other. In the first category are the need for research and dissemination systems that serve the unique interests of small farmers, and the need for small farmers themselves to learn to anticipate and cope with structural and organizational constraints that make them dependent upon the political and economic decisions of others.

In the second category, specific skill requirements, is the need for the farmer to remain constantly aware of his options with regard to the types of legal association in which he can participate, the variety of technological inputs at his disposal, and the sources of information to which he has access. There is the need for managerial skills adequate to keep abreast of new technological developments, analyze them, and utilize those most appropriate. The farmer must also develop life skills that will enable him to take advantage of the numerous resources available in the agricultural community around him--knowledge of what and where they are, comprehension of the steps necessary to make contact with them, and the interpersonal skills required to deal with the individuals who deliver the desired services. Finally, there is the implication that training vehicles must vary in accordance with the unique needs of different segments of the target population: those who are already established as family farmers, those who wish to enter the field, ethnic groups, those with previous formal education in agriculture as opposed to those with limited education of any kind, etc.

GENERAL TRAINING NEEDS

Educational processes should enable family farmers to relate more effectively to institutions within the agricultural industry (banks, other credit institutions, production marketing boards, etc.) and to the community at large. Through participation on local commissions and in the schools, farmers can become a positive political and social force in the rural community. Along with others, they can work to generate changes in the institutions and laws which affect their lives, e.g., by demonstrating support for innovative processes of land use planning and environmental regulations. As farmers become involved in these group processes, in farmers' associations, or in cooperative farming endeavors, they need to acquire an understanding of group dynamics and parliamentary procedure.

Farmers should also be made aware of the potential for community action in generating new resources for the rural sector. Community groups must be able to determine the resources needed (e.g., health, transportation, social services, vocational training, etc.), identify private, state, or federal agencies that can satisfy these needs, and master the bureaucratic processes through which the desired services are obtained. Farm families with limited resources should also be informed of the principles of organizing buying clubs, consumer cooperatives, and other structures for increasing their purchasing power. They need to know how to buy selectively and cost effectively.

Instruction in English as a second language (ESL) may be helpful to farmers who speak little English by giving them the linguistic tools with which to deal effectively with the English-speaking agricultural community upon which they depend for resources. Language training seems to be most effective, however, when associated with specific agricultural topics or farm activities. Farmers who have had limited access to formal education may also find use for general education courses such as basic mathematics.

PRODUCTION, MARKETING, AND MANAGEMENT SKILLS NEEDED BY SMALL FARMERS

Any person intending to go into business as an agricultural producer, independent of the legal structure under which he intends to operate, should have attained a certain skill level in order to produce crops or animals, market them, and manage his business successfully. The farmer should also be sufficiently familiar with the local agricultural infrastructure to be able to find appropriate sources of advice and assistance or to contract for services he cannot himself perform. Knowledge and/or contacts are necessary in the following areas of production, marketing, and management for a person to be successful as a small farm owner-operator.

Evaluation of land and water quality

When a farmer first seeks land, he should know how to evaluate the quality and potential of its soil and water. He should be able to assess the soil type, its salt and nutritional levels, the depth of the topsoil, and the degree of leveling or grading needed. In most cases the farmer will have to change the condition of the land substantially in order to plant. Adequate water conditions are equally essential for land evaluation. The farmer should be able to assess the water pressure and drainage structures of the land; he should know climate condition, level of water tables in the area, and the general quality of the water. With regard to both soil and water, the farmer should know where to go for help, e.g., from Farm Advisers and soil and water laboratories, to ensure proper analyses and amendments.

Irrigation

Another primary step in production is choosing the irrigation system most appropriate to the condition of the land and to the crop to be grown. The farmer should know the best sites for digging wells, the potential for water pressure, the soil type, and the quality of the water. These factors will assist in determining the amount of water needed, size of pump, and the requirements for leeching and draining. Farmers should be familiar with all of the current systems of irrigation: flood, drip, furrow, and rain, and should also understand the use of plastics and reservoirs in irrigation. They should be aware of the availability of advice on irrigation systems from Farm Advisers, soil laboratories, and pump companies.

Land preparation

The cost of labor and capital, the limits of land and water resources, and the complexities of modern farming technology make land preparation a difficult science. The farmer should know about ripping, plowing, leveling, using a land plane, discing, chiseling, and the use of chemicals for fertilizing and fumigating. In addition to these soil amendments, a knowledge of organic fertilizers (e.g., manure) is important. Sharing the equipment for land preparation among farmers and using it efficiently saves money and time. If the farmer lacks equipment or skills, he should know where and how to contract them.

Agricultural machinery

The farmer should have a knowledge of farm machinery before he buys or leases it. He should be able to select machinery appropriate to his needs and know how to use it properly. He can increase the cost effectiveness of his farm machines and implements through proper maintenance and by knowing how to perform basic repairs himself.

Planting techniques

Planting techniques are numerous and difficult for most crops. In order to hit a high market price or complete a given plant rotation, the farmer should plant according to a production schedule. Skills for timely and efficient planting are developed through experience and education. In addition, farmers should be aware of new varieties and their applicability to the land, the climate, and other conditional factors.

Greenhouse planting techniques

Greenhouse production is more delicate than regular field crop production. Because the environment is artificially controlled, sophisticated technical and management skills are required. The farmer should be educated in cultural practices, transplanting techniques, temperature, and the machinery required in this modified environment.

Cultural practices

Cultural practices are another phase of farming that requires experience and training in order to utilize new farming techniques and products. Weed and pest control, spraying, cultivation, pruning, thinning, and irrigation are the major skills a farmer needs to maintain and grow an agricultural product. To care for his plants, the farmer should also be able to detect and prevent nutritional and disease problems. Seeking intelligent advice about fertilizers and pesticides is extremely important.

Chemical and other inputs

Amendments of the conditions for production include chemical as well as organic and biological inputs. The chemical control of pests, for example, may be combined with biological control. Fertilization may require either a chemical input or an organic input such as manure. Farmers should be able to distinguish the proper inputs and equipment for herbicides, pesticides, fumigants, and fertilizers, and they should know the methods for their application. The selection and application (both methods and rates) of chemical inputs are particularly important because they are potentially harmful to both the plants and the farmer. Hence, training should include safety measures, licensing requirements, and other legal constraints.

Animal husbandry

The farmer should know how to select animals for purchase. He also needs a background in animal care, including feeding, spacing, shelter, and disease control and prevention. Breeding, marketing, and transportation are other areas of required knowledge. Ability to relate costs to revenues at every level of selecting and raising animals is extemely important to this costly farming endeavor.

Harvesting and delivery systems

A farmer's profit may be determined by his ability to market a quality product. Proper picking, grading, packaging, and labeling must be observed. Farmers should be able to comply with quality control standards, especially in advanced marketing systems, where the product name and reputation are very important. The price received for fruit and vegetable crops and livestock is often determined by market timing. During the harvest, market prices and the break-even point of the harvest operation should be analyzed on a daily basis. Because advice from brokers is important at this time, farmers should have the skills and insight to evaluate the recommendations they receive.

Rotation planning

Long-range production planning for maximizing profits often includes rotating and diversifying crops. Economic gains increase as a result of improvements in soil fertility, soil structure, the control of pests, and conserving soil and water.

Future trends

As the business of farming changes at an increasingly rapid rate, farmers must continually develop their skills, education, and insights. This is particularly important because they are forced to speculate on the crops they should grow. In order to make projections and plans, they should be aware of the latest publications from the government, from farm machinery companies, from universities, and from agriculture-related businesses. In addition, they should talk to farm advisers, bankers, and representatives from local farming businesses to understand current prices, loan opportunities, and marketing trends.

Technology

Because the technology of farming is constantly changing, farmers should understand current trends to maximize the cost effectiveness of their farming operation. Training should include a presentation of new plant and animal technologies, seed varieties, cultural practices, machinery, and implements. The small farmer should be able to evaluate these developments through technical performance ratings and cost-return analyses.

Developments in small-scale technology are important to the farmer whose resources are limited. The farmer should be aware of the latest innovations and most efficient systems to provide for the maximum utilization of his land and water and to preserve environmental quality. Currently, for example, fuel is scarce and expensive, and farmers need the skills to use alternative sources such as butane or diesel for machinery and solar energy for greenhouses and starter sheds. In considering small-farm technology, energy consumption and application are primary concerns.

Marketing principles

Because success in agriculture is often contingent on the farmer's ability to market profitably, the Training Task Force recommends a particularly strong emphasis on the study and analysis of current market trends and structures. The small farmer should know how to analyze the market *before* he plants, for farm production is often subordinate to the dictates of current market trends and the fluctuation of supply and demand. To predict and control his impact on the market, the farmer should participate in the marketing process and understand the general system.

Marketing outlets. A common complaint among farmers that do not participate in the marketing system is that the "middleman" takes all the profits. Often, however, the broker is an indispensable adviser and salesman for the product. Other outlets include marketing cooperatives, processers, and local brokers, retailers, chain stores, and product terminals. Some growers rely upon two or more outlets during a season to safeguard against the possible failure of one.

Marketing contracts. After the farmer understands basic marketing concepts, he should learn the legal tools and methods for marketing. Negotiating satisfactory marketing contracts with marketing agencies and outlets is extremely important.

Product promotion. The farmer should understand the purpose and application of grading, labeling, packing, and shipping to improve both the quality and price of his product. By taking advantage of mechanisms such as advertising, shipping and packing innovations, and new storage techniques, the farmer can increase the price he receives for his product.

Potential impact of alternative systems. Farmers should be aware of efforts to coordinate the transitional steps of marketing into a single large-scale process. By participating in an integrated marketing system, the farmer has more control over his bargaining position and the distribution of marketing margins.

Farm management

Lack of skills and comprehension in farm management, along with marketing is a major cause of small farm inefficiency and eventual failure. A basic understanding of accounting principles and economic analysis is essential for farm operations. Independent farmers who possess this knowledge are better prepared to keep track of cash flows through financial statements and records, conduct their own feasibility studies and needs analyses, do their own tax filing, and make marketing decisions. Farmers should be aware, however, of the special services provided by banks and other credit institutions to assist them in their financial management.

Farmers also need to understand contracts and their conditions. To ensure that they enter into only mutually satisfying and sound agreements, farmers should learn the principles of negotiations and where to seek legal advice. Lease agreements, a primary contract of the farmer, may include negotiations with the landowner, the real estate agent, and the existing tenants. In each case, the farmer should understand the importance of payment schedules, obligations for repair, and release and purchase conditions.

The small farm owner-operator also needs skills in the area of personnel management. He should be able to formulate a personnel policy, and he should be aware of skill upgrading programs for employees which, if instituted, will help him to eliminate inefficient hiring practices that result in costly fluctuations of the work force. A stable and skilled work force increases production capacity and allows for long-term production planning. The farmer should also be aware of his legal obligations to employees, including fringe benefits, levels of pay, health and safety conditions, and employee rights for unionization.

Farm skills

Farmers with limited resources can economize by acquiring basic skills in general carpentry, plumbing, electrical wiring, and welding for home and farm building construction and maintenance. In addition, because the small-farm family, unlike the urban family, has sufficient land to produce much of the food for its own consumption, one or more members should have the skills necessary for vegetable gardening, fruit and nut growing, and small animal production. Knowledge and practice of food preservation processes can also work significant savings in the family budget.

KNOWLEDGE OF ALTERNATIVE FORMS OF OWNERSHIP

In order to utilize his relatively limited resources to the best advantage, the small farmer should be aware of alternative forms of ownership for farming operations. Because modern trends in farming require heavy capital investment in land, equipment, and supplies, sole proprietorship is not necessarily the most economically feasible structure for farming. Farmers should understand limited partnerships, corporations, and cooperatives as viable alternatives to sole proprietorship and should be aware of the decision-making process in each of these structures, as well as property ownership conditions, liability, the division and distribution of profits, and taxation.

Scarce land and water resources and limited buying and marketing power are factors that can compel family farmers to work and make decisions cooperatively. They may choose to cooperate only at certain levels of operations, or they may become owner-operators in farming endeavors that demand total participation (e.g., production cooperatives). Whether they are organized into a partnership, a corporation, or a cooperative, a group of farmers collectively has more skills and farm experience than does a single proprietor. Joint farming ventures also facilitate the exchange of ideas and resources among farmers and thus serve as a broader base for expansion and development. Because the social dynamics inherent in group endeavors often determine their success or failure, education for participation in them must be comprehensive. The following topics should be included:

Definition of the business structure

It is essential that the farmer understand the principles and purposes of the joint farming enterprise in which he is involved, in the context of its social and economic benefits and in relation to other businesses. He should have a sophisticated understanding of the legal restrictions and powers of his enterprise. For members of a production cooperative or a corporation, a sound legal knowledge of their nontraditional role as worker-owners of their farm is especially important.

Legal constraints

If several farmers decide to incorporate, they should understand the legal implications of Articles of Incorporation, by-laws, and other agreements and contracts. In drafting their Articles of Incorporation, the members should seek the assistance of a lawyer to help them formulate the statutes that will bind them. When they draw up their by-laws, they may again need legal advice to determine the extent of their ownership interest and to define their specific operational guidelines. In order to develop their by-laws in accordance with state and federal regulations, they should be aware of the restrictions of federal taxation, anti-trust, and security laws. They should be able to develop contracts and agreements and understand their legal implications.

Organizational management

Since the members or shareholders of joint farming endeavors are not employers but owners, the usual management techniques of traditional corporations are not always applicable. In each case, the management and the co-owners or partners have a delicate relationship. In production cooperatives, for example, the three managerial groups (the members, the directors, and the staff) should clearly understand their relationship with one another and the distinction between their functions. Their responsibilities should be clearly delineated in the by-laws so that they know the extent and limits of their powers. The formation of committees in larger corporations is another aspect of management training.

Financial management

Each participant in a joint farming operation needs a basic understanding of accounting and financial planning principles so that he can not only keep proper records of his own expenditures and income but also comprehend and evaluate the fiscal records of the overall business. He should be prepared to keep abreast of sources of financing for production and expansion and should understand the implications of a good fiscal management record in obtaining credit. He should also comprehend the process by which he builds up equity in the business. Co-owners in farming businesses should have sufficient expertise to utilize intelligently the services of accountants. They should know the tax regulations for their organization and be able to deal with auditors.

Production management

Partners and others engaged in an associative relationship should be able to develop management mechanisms for decision making regarding annual crop production and day-to-day field work. The peculiar problems of multi-ownership must also be anticipated, e.g., the destruction of a member's crop if it is diseased, or provisions for a bad year. Solutions to these problems can be incorporated into legal agreements or, in the case of corporations, into the by-laws.

Marketing

The collective marketing of farmers' products, particularly within cooperative structures, is one of the most attractive benefits of joining forces in farming enterprises. Therefore, it is important that participating farmers understand the bargaining power they gain when they pool their products on the market. They should have sufficient knowledge of marketing principles to be able to participate in marketing decisions along with the other members of their farming enterprise.

III. TRAINING RESOURCES AVAILABLE TO THE FAMILY FARMER

In this section of the Training Task Force report, the scope and effectiveness of existing training resources are examined. The legal mandates of the various institutions are outlined briefly and then compared with actual track records. Each discussion concludes with an analysis of the weaknesses of the organization with regard to family-farmer training.

Two generalizations can be made regarding the training resources available to family farmers. First, agricultural degree programs offered by the formal education system (high schools, adult evening schools, community colleges, state universities, and universities) are generally adequate to satisfy current demand. Second, nonformal agricultural-education programs (special short courses not geared to academic curricula or the semester system, provided by community colleges, Regional Occupational Programs and Centers, and community-based organizations), while adequate to meet present demand, are totally inadequate for potential demand. Demand is low at present in part because the clients for such courses are unaware of their existance (most resource agencies have no outreach programs) or feel too alienated by the training atmosphere to apply. Ironically, however, the number of people currently being prepared for independent farming by both the formal and nonformal education systems far exceeds the access that graduates have to either land or financing.

SECONDARY SCHOOLS

Four hundred and twelve public secondary schools in California maintain vocational agriculture programs. Funding for these programs is provided by local taxes, state apportionments, and federal vocational education funds. Over the state, 723 teachers are employed in vo-ag programs; they reach 52,000 students annually in grades nine through 12, including 17,000 female students. Nine thousand young people graduate from high school vo-ag programs each year. Most of these programs include instruction in production agriculture, agricultural mechanics, and ornamental horticulture. Many also offer programs in products processing and agricultural supplies and services. Whereas 80% to 90% of all vo-ag students used to specialize in production agriculture, only about half do so now, and the number is decreasing. Vo-ag programs are found in nearly every county in California; hence they are accessible to almost every son and daughter of a farmworker or family farmer, as well as to any other young people interested in agriculture.

High school students enrolled in vocational agriculture courses can take advantage of special cooperative programs that combine on-the-job agricultural training with regular high school instruction; work-study programs are also available. A unique opportunity for practical experience is provided through the Future Farmers of America, which is administered by the secondary school system. FFA programs offer individual and group leadership activities, encouragement for project competition, use of the equipment and tools of farmers who support the program, placement on local farms for on-the-job experience, and college scholarships allowing disadvantaged youth to receive $1,250 in annual grants to enroll in agriculture at a community college or state university for the purpose of preparing to be vocational agriculture teachers.

Task Force members associated with programs for farmworkers asserted that the children of farmworker families rarely enroll in the vo-ag curriculum because they hold agriculture in low esteem and hence aspire to careers in other fields. This is largely because they have experienced on the negative aspects of farming as manifested in the work of migrant and seasonal farm labor: hard physical exertion, monotony, lack of job security, and low annual income. Given their life experience, they do not normally consider independent farm ownership a viable career alternative.

It is clear that vo-ag education is widely available to high school students (although the supply of new vo-ag teachers is currently below the annual demand level). While the popularity of high school vo-ag courses is generally high, there are no specific data to indicate how many graduates with agricultural specializations obtain the available jobs; it is assumed that the average is relatively low, since they must compete for them with less educated but more experienced farmworkers.

ADULT EVENING SCHOOLS AND REGIONAL OCCUPATIONAL CENTERS AND PROGRAMS

Specialized skill training is available to adults and out-of-school youth through three public education programs: Adult Evening Schools, Regional Occupational Centers, and Regional Occupational Programs, all administered by the State Department of Education.

Adult evening schools receive funds from the state and from federal vocational education legislation to conduct regular secondary education classes in vocational areas, including agriculture. Few provide agricultural courses, however, in part because there is relatively little demand. Under the terms of the new Federal Vocational Education Act,[1] adult evening schools can be strongly encouraged in the future to offer instructional programs appropriate to a large segment of the present or aspiring independent farmer population. The Act places emphasis on vocational education for the academically disadvantaged and on bilingual instruction. Unfortunately, recent decisions by the Joint Committee on Vocational Education regarding implementation of the Federal Vocational Education Act have placed priority emphasis on urban areas, leaving few funds available for application in rural areas.

The Regional Occupational Centers and Programs, which are supported by local tax levies and state funds, are more responsive to the needs of adults and out-of-school youth who are interested in agriculture. Their course offerings are more flexible than those of the standard secondary programs provided by adult evening schools, and they are usually more specialized or technical. There are 67 Regional Occupational Centers or Programs functioning at present. Their agriculture-related courses include technical training ranging from such specifics as horseshoeing, vine pruning, wool shearing, and agricultural chemical application to broader courses on such subjects as landscape gardening, horticulture and nursery operation, agricultural resources and production, agricultural mechanics, and forestry and land management. Relatively few of the centers, however, provide courses specifically related to agricultural production, and even fewer teach courses related to farm business, management, or marketing.

The major inadequacies in the agricultural training made available to out-of-school adults by adult evening schools, Regional Occupational Centers, and Regional Occupational Programs can be summarized as follows:

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[1] In 1976 the Vocational Education Act of 1963 was amended to add new areas of emphasis to the existing programs funded under the Vocational Education Amendments of 1968. The new priorities take the form of categories for funding and indicate the interest that the U.S. Congress has for expanding federal support for all facets and functions of the program of vocational education. Categories added include vocational guidance and counseling, pre-service and in-service training for personnel, grants to overcome sex bias, renovation and remodeling of facilities, and a category to assist state planning. Twenty percent of the Federal Government's basic state grant is to be set aside for the disadvantaged, 15% for post-secondary vocational education, and up to 5%, depending upon state population, for limited English-speaking programs. The increased responsibilities assigned to vocational education by the Congress are based on the premise that these programs provide a unique means whereby individuals can prepare for employment or for upgrading or retraining themselves for employment. The total federal allocation for vocational education in 1978 will be $1.08 billion, with annual increases reaching a total of $1.7 billion in 1982.

- all three lack outreach or incentive programs to recruit out-of-school adults who often have little confidence in the public education system or feel uncomfortable with it;
- adult evening schools, like public secondary schools, lack flexibility, e.g., they are tied to semesters and standard curricula;
- both adult evening schools and ROP/Cs currently lack capability for bilingual instruction; and
- teaching facilities normally are located in urban areas, making it both inconvenient and costly for rural residents to attend classes.

COMMUNITY COLLEGES

The Educational Code of the State of California states that the course of study of community colleges shall be designed to fit the needs of students of the 13th and 14th grades and may include courses of instruction to prepare persons either for admission to the upper division of higher institutions of learning or for agricultural, commercial, homemaking, industrial, and other vocations. Since its inception in 1907 the community college system has grown to 104 colleges and 2,700 off-campus outreach locations serving 1.3 million students with over 6,500 certificate and degree programs. Community colleges offer certificate programs for students interested primarily in attaining a skill and associate degrees (which include academic as well as professional courses) for those who anticipate continuing their higher education in a four-year university.

Of the 104 community colleges, 59 have agricultural programs. The agriculture curriculum varies from comprehensive agriculture and natural resources programs to programs covering only one area, such as ornamental horticulture. There are 633 agriculture and/or natural resources instructors, 236 of them full-time; the largest single department has 17 full-time instructors. In 1974-75, when occupational education students accounted for 61% of all community college enrollments, 3% (22,752) of the occupational students were enrolled in the agriculture curriculum.

In accordance with their evolving mandate, the community colleges have undertaken efforts in recent years to educate in new and more effective ways those not traditionally served. A variety of federal and state statutes call for specific plans to serve certain categories of nontraditional students. Community colleges can, for example, provide special short courses on any subject, without academic entrance requirements. Hence they are an excellent resource for adults and out-of-school youth who wish to upgrade their knowledge or skills in a given area. While few currently offer short courses of interest to present or aspiring independent farmers, an experimental job-ladder program for farmworkers in Fresno County indicates that enrollees are not lacking if the subject matter is appropriate and there is adequate outreach.[1] Courses can be given in languages other than English, or bilingual teaching assistants can be contracted to translate. Short-course instructors are not required to hold teaching credentials.

LAND GRANT COLLEGE COMPLEX

The land grant college complex is made up of three components: the land grant college itself, the agricultural extension service, and agricultural experiment stations. This complex grew out of a series of complementary legislative acts designed to assist the agricultural sector. The Morrill Act of 1862 provided for the original grants of land and endowments to establish land grant colleges. In 1887, the Hatch Act was passed to assist the land grant colleges in carrying on agricultural research and in establishing experiment stations to look into pressing agricultural problems. To facilitate the dissemination of information developed at the colleges and experimental stations, the Smith-Lever Act of 1914 was passed, creating the Cooperative Extension Service. With the federal assistance provided by the Hatch Act and the Smith-Lever Act, the land grant college complex has been able to carry out more efficiently the original Morrill Act mandate of supporting and maintaining the agricultural sector.

Subsequent federal legislation provided additional amending phrases and funding for general and specific work. The Second Morrill Act stipulated that no money would go to any college that practiced segregation. In 1946, the Agricultural Marketing Act provided for extensive research to establish "an integrated administration of all laws so that marketing is improved, costs reduced, dietary and nutritional standards improved, and wider markets developed, resulting in the full production of American farms being disposed of usefully, economically, profitably, and in an orderly manner." Amendments in 1955 further outlined policies for efficient production, marketing, distribution, and utilization of products. Also added to the Hatch Act with the 1955 Amendments was the following "Special Needs" section, which authorizes up to 10% of the total appropriation for extension for work to be allocated over and above the annual appropriation to "Disadvantaged Agricultural Areas."

> "(a) The Congress finds that there exist special circumstances in certain agricultural areas which cause such areas to be at a disadvantage insofar as agricultural development is concerned, which circumstances include the following:

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[1] The job-ladder program provides short courses (e.g., 10 hours, 16 hours) in specific farm-related skills. It is designed to prepare the hired farmworker to do a variety of farm jobs which will enable him to work year-round on a single farm. At the same time courses in farm personnel management are offered to ranchers so that they can use appropriately trained, full-time, permanent employees to the best advantage. Collaborating in the job-ladder program along with the community colleges are the Rural Economics Institute, the Cooperative Extension Service, the State Employment Development Department, and the State CETA Office.

> "(1) there is concentration of farm families on farms either too small or too unproductive or both; (2) such farm operators because of limited productivity are unable to make adjustments and investments required to establish profitable operations; (3) the productive capacity of the existing farm unit does not permit profitable employment of available labor; (4) because of limited resources, many of these farm families are not able to make full use of current extension programs designed for families operating economic units, nor are extension facilities adequate to provide the assistance needed to produce desirable results.
>
> "(C) In determining that the area has such special need, the Secretary shall find that it has a substantial number of disadvantaged farms or farm families for one or more of the reasons heretofore enumerated. The Secretary shall make provisions for the assistance to be extended to include one or more of the following: (1) intensive on-the-farm educational assistance to the farm family in appraising and resolving its problems; (2) assistance and counseling to local groups in appraising resources for capability of improvements in agriculture or introduction of industry designed to supplement farm income; (3) cooperation with other agencies and groups in furnishing all possible information as to existing employment opportunities, particularly to farm families having underemployed workers; and (4) in cases where the farm family, after analysis of its opportunities and existing resources, finds it advisable to seek a new farming venture, the providing of information, advice, and counsel in connection with making such change."

Although this section has been implemented in some states, it has not been applied to any appreciable degree in California, and there is no evidence that the funds available under the section have provided any meaningful assistance to the state's family farmers.

The University of California is a land grant college. The original legislation establishing the university is similar to that of other land grant colleges; however, events peculiar to California distinguish the University of California from other such colleges. The early history of the development of the University of California as a land grant college has been traced by Emmett P. Fiske in several papers.[1] The following information is excerpted from one of his papers describing the early development of the extension service.

The University of California's Cooperative Extension efforts grew out of Farmers' Institute activities conducted by its College of Agriculture during the 1890's and the early 1900's. These institutes broadened the format of agricultural research dissemination from one stressing written reports (in the form of Agricultural Experiment Station bulletins and articles submitted to scientific journals and agricultural periodicals) to one which allowed for direct communication between the agricultural researchers and the farmers themselves. This contact took the form of lectures and question-and-answer sessions held in agricultural communities throughout the State.

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[1] Emmett P. Fiske, "The Status of Rural Research at the University of California," and "Evaluation of Cooperative Extension Efforts at the County Level: The University of California Example," papers presented at the Annual Meetings of the Rural Sociological Society, August 1975 and September 1977, respectively.

The weakness of the Farmers' Institute idea was that it did not go far enough: there was no accompanying field demonstration that would allow the farmers to see the practical value of the information disseminated. The University had neither the budget nor the manpower to address this aspect of dissemination until in 1913 a county government allocated money to the University to provide for someone to work year-round on local agricultural problems using organizational techniques and demonstrations.

This initial thrust was augmented the following year by passage of the Smith-Lever Act of 1914; with the formal creation of a Division of Agricultural Extension, the University entered into an agreement with the USDA to locate agricultural farm advisers throughout the state to give "instruction and practical demonstrations in agriculture, home economics, and subjects relating thereto to persons not attending or resident in said colleges in the several communities, and imparting information on said subjects through demonstrations, publications, and otherwise."

More of the history and background of the University of California's role as a land grant college has been traced by John Flynn in "The University of California and the Farmer."[1] Much of the following information, excerpted from Flynn's research, shows how the Extension Service of the universities in California differs from that of other states in its land grant college role.

The Smith-Lever Act provided a basic grant of $10,000 to each state for the creation of an Extension Service, with additional amounts prorated on the basis of the state's rural population. These funds were to be matched by state, local, and private funds. The plan was essentially a cooperative one among the USDA, the University of California, and county governments. The University cooperated with the USDA in carrying out the work of the Extension Service, but maintained authority in the selection of Farm Advisers and all extension workers. Extension salaries were paid by the University from state and federal funds. County governments provided office expenses and clerical help.

Broad responsibility, then, was accepted by the University in implementing the Smith-Lever Act so that research results would ultimately reach every farmer in the state. The movement to launch extension education stimulated the farmers to organize, and extension workers themselves were encouraged to help rural people learn the value of the organized approach to community problems. Small groups of farmers began to organize into "educational" groups and gradually began holding meetings in centralized areas which became known as Farm Bureau Centers. These Centers became the organizational offices for not only the Farm Bureaus but also the Extension Service.

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[1] John Flynn, The University of California and the Farmer, American Friends Service Committee, 1968.

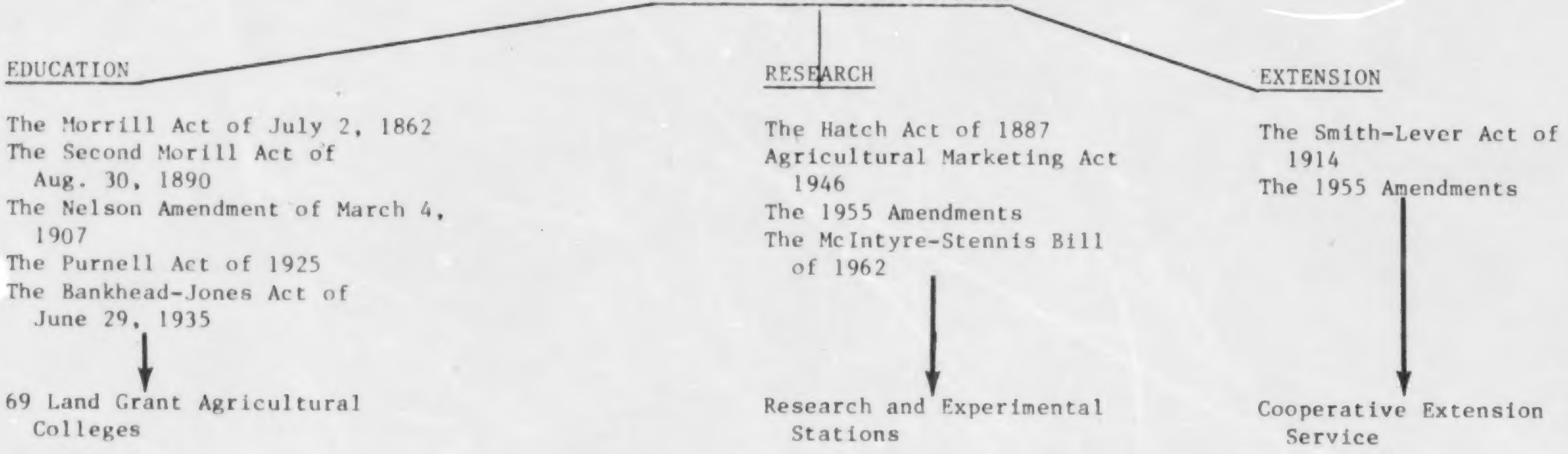
The State and the University set up guidelines which charged each county to meet certain conditions before an Extension Service office would be set up. The most significant guideline stipulated that the appointment of a Farm Adviser to any county was contingent upon the formation of a county Farm Bureau with at least 20% of the farmers in that county as members. The rationale given by the Extension Service was that there was insufficient organization in rural areas and this was the only practical way to implement the intent of the Act. Thus the Extension Service and Farm Bureaus passed through a parallel organizational process. The Farm Bureau Federation was formed in 1919 and soon became the most powerful single political and economic organization representing farmers in the state.

By 1939 agriculture in California was well served by the University through its Extension Service and Experimental Stations, as well as through the Giannini Foundation organized two years earlier through the largess of A. P. Giannini. The Giannini Foundation was established for the purpose of conducting research in agricultural economics (production-cost studies and commodity economic surveys) and to inform farmers of favorable and unfavorable economic consequences. Giannini's gift of $1.5 million, combined with federal and state funds, made it possible for the University to expand its program in agricultural economics and make it an integral part of the College of Agriculture.

The University's research work was greatly augmented with the addition of agricultural experiment stations at Davis, Mountain View, Delhi, Shingle Springs, Petaluma, Porterville, and in the Imperial Valley. Supported by strong pressure groups like the Farm Bureau and backed up by the University's agricultural programs and experiment stations, the Cooperative Extension Service, and the Giannini Foundation, agriculture in California soon became the most dynamic, complex, and productive force in the state.

During World War II the College of Agriculture cooperated with the USDA in mobilizing agricultural resources for the war effort. In 1945, at the war's end, the State Legislature created the Agriculture Research Study Committee, directing it to assess information from farmers, farmer asociations, commodity groups, and other reliable sources regarding the type of research and information needed to contribute to progress in agriculture. The committee was also authorized to make recommendations regarding the use of funds appropriated for the next two years. This committee had predecessors dating back to 1920 when the Agricultural Legislative Committee, later called the Agricultural Council of California, was created for somewhat the same purposes. The 1945 law provided for a committee of nine members, three from the public at large and six having "practical knowledge and experience in the production or distribution of agricultural, horticultural, viticultural, livestock, and dairy products." The committee met many times, conducted public hearings throughout the state, and received hundreds of requests for research. At the same time, the Farm Bureau Federation strengthened its lobby to make sure its influence was felt. The College of Agriculture thus found it necessary to respond to the demands of legislative committees, the Farm Bureau, and independent farm associations.

LAND GRANT COLLEGE COMPLEX



EDUCATION

The Morrill Act of July 2, 1862
The Second Morill Act of Aug. 30, 1890
The Nelson Amendment of March 4, 1907
The Purnell Act of 1925
The Bankhead-Jones Act of June 29, 1935

69 Land Grant Agricultural Colleges

RESEARCH

The Hatch Act of 1887
Agricultural Marketing Act 1946
The 1955 Amendments
The McIntyre-Stennis Bill of 1962

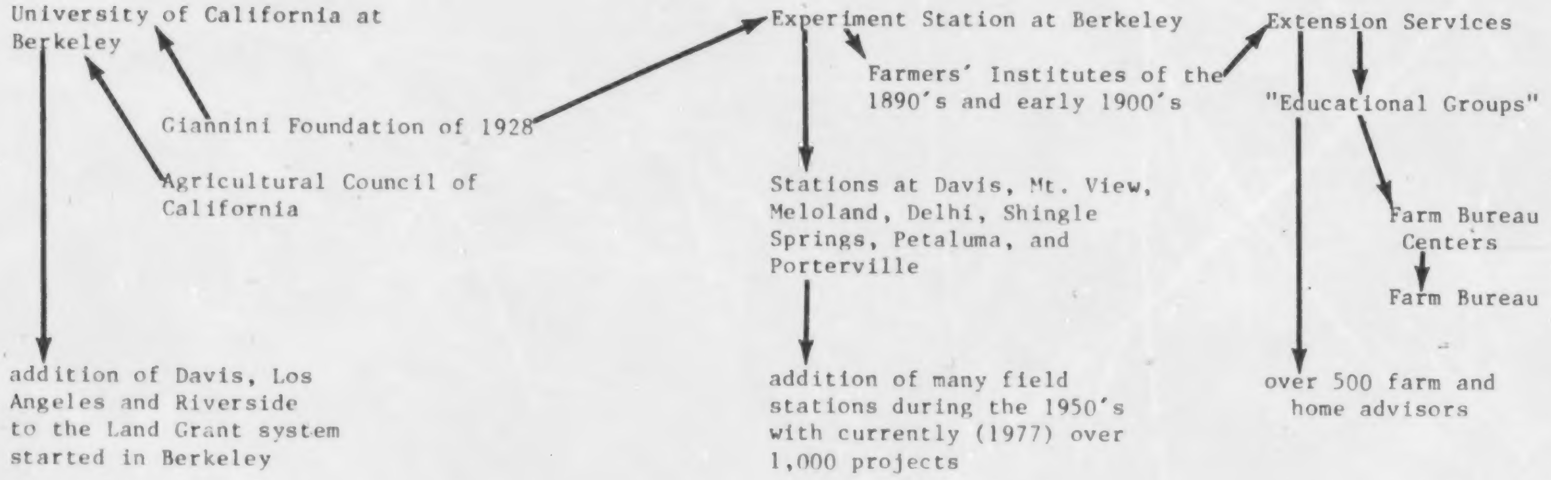
Research and Experimental Stations

EXTENSION

The Smith-Lever Act of 1914
The 1955 Amendments

Cooperative Extension Service

THE LAND GRANT COLLEGES IN CALIFORNIA



University of California at Berkeley

Giannini Foundation of 1928

Agricultural Council of California

addition of Davis, Los Angeles and Riverside to the Land Grant system started in Berkeley

Experiment Station at Berkeley

Farmers' Institutes of the 1890's and early 1900's

Stations at Davis, Mt. View, Meloland, Delhi, Shingle Springs, Petaluma, and Porterville

addition of many field stations during the 1950's with currently (1977) over 1,000 projects

Extension Services

"Educational Groups"

Farm Bureau Centers

Farm Bureau

over 500 farm and home advisors

Many new field experiment stations were established during the 1950's. Today more than 1,000 research and experimental projects are under way, varying from field studies to improve the pig's environment in the hot interior valleys to research into photosynthetic phosphorylation. A close relationship is maintained between the University's research programs and experimental stations and the Giannini Foundation.

The Cooperative Extension Service today has over 500 Farm and Home Advisers and Specialists. In cooperation with experimental stations, the Extension Service has several thousand test, demonstration and research plots distributed over the state. Its work has become as highly specialized and scientific as the industry it serves. In addition, more than 40,000 boys and girls are involved in 4-H Clubs under its direction.

As the land grant college complex has grown in California, it has responded increasingly to the needs of strong agricultural groups such as the Farm Bureau and agri-business interests. These groups are typically made up of the most powerful and articulate farmers and businessmen. Small farmers have not had a strong pressure group of their own capable of wielding equal leverage. While some small farmers have been able to glean limited benefits from the University's research, the Task Force feels that the University should concentrate more effort, within the scope of agricultural problems that are the appropriate subject of University activities, on those that are particularly critical to the small farmer.

COMMUNITY-BASED, NONPROFIT ORGANIZATIONS

Community Development Corporations

Community development corporations gained their present operational status under Title VII of the Community Services Act of 1974. Under this title, CDCs are to serve low-income communities or neighborhoods in both urban and rural areas. Their "size, scope, and duration" must be sufficient for "arresting tendencies toward dependency, chronic unemployment, and community deterioration." According to the mandate, programs implemented by CDCs may include (1) economic and business development to provide ownership and employment opportunities, (2) community development and housing activities to create new training, employment and ownership opportunities and to contribute to improved living environment, and (3) manpower training programs which support and complement the economic, business, housing, and community development programs. Generally, CDCs integrate all three types of programs into a strategy for stimulating inflow of money into the community and for stabilizing the working situations of the local population.

Though they share common objectives, the projects of CDCs vary according to the resources which are locally available for development. For example, in Alaska where rural areas are plagued by the displacement and poverty of the Indians, the Community Enterprises Development Corporation in Anchorage is implementing six fishery ventures as part of its strategy to build local industry. In rural California, where agriculture is a lucrative business, CDCs are assisting seasonal workers to enter into farmer cooperatives and other farming enterprises. CDCs can also invest in minority businesses to generate employment and to perpetuate ownership by the community. The Denver Community Development Corporation has bought stock in a telephone equipment plant, a food processing company, and a printing company in the local area with a goal of increasing job opportunities and management positions.

The self-help projects and business initiated by CDCs often lack financing from within the local area and are dependent on loans from external sources. Title VII allows CDCs to issue loan guarantees and to leverage funds from the SBA, EDA, and HUD. Because they are nonprofit corporations, CDCs are also eligible for funds from other federal agencies, private donors and foundations. In the history of CDCs, however, both the public and private sector have been hesitant to fund businesses that lack substantial start-up capital. Incomes and savings are so low in poor communities that most business enterprises cannot build adequate seed capital or equity. According to Geoffrey Faux, a specialist in the field of CDCs, "businesses are financed--if they get financing at all--with a high proportion of debt instead of equity and are burdened with the necessity of paying off the debt in the early and most critical stages in the life of the business." Equity capital is the basis for projecting loan needs and for bargaining for funds. Thus, in order for CDCs to leverage funds for businesses and projects, they need an equity base with which to work. CDCs must provide both equity capital and debt financing, sometimes by organizing their own investment corporations or Minority Enterprise Business Investment Companies (MESBICs).

Concurrent to the development of adequate finances is the development of structures and training needed for local residents to control their own businesses. Previous to the creation of CDCs, economic development programs concentrated on single entrepreneurships. Community development corporations, however, generally develop businesses that can operate on a large scale. In this way, more local residents have an opportunity for training in management skills, in gaining contacts and in job placement. CDCs in Philadelphia and Cleveland, for example, have developed shopping centers whose enterprises are owned and operated by local residents. Other urban CDCs have developed processing plants and mechanical parts factories which employ hundreds of workers from the community. In rural agricultural areas, California's Central Coast Counties Development Corporation (CCCDC) finds that the farmer production cooperative provides an excellent structure for training a large number of farmworkers (usually 15 to 35) in every phase of their businesses. In their combined role as owners and workers, the members are responsible for both administration and production. A group process, implicit in the structure of cooperatives, generates the exchange of ideas, instruction between peers, and cohesive social ties.

Large-scale businesses are also conducive to "institution building." In many poor communities, institutions from the outside (i.e., the educational system, commercial enterprises, political structures) often control the lives of local residents. Through an organized and strong economic base, however, community members can exercise a renewed social and political power. They can mobilize institutions which truly reflect their resources and capabilities and which are responsive to their needs and goals. As a result of this process, linkages within the community and in the surrounding areas are more likely. CDCs are in a better position to influence schools, federal agencies, and financing operations to align their policies with locally controlled institutions. Thus, economic ownership is a vehicle for institutional control, more broadly based ties, and eventual integration into political and financial power structures.

Local control is never realized immediately, however, and conflicts between the community and the CDC often arise before it is accomplished. Because management skills and technical knowledge are usually lacking in low-income communities, the CDC may make the primary decisions for a new business. Many times participating community members feel that their decision making power is being usurped. Federal offices also make the demand, often prematurely, that local residents exercise complete control of their businesses. The Community Enterprises Development Corporation of Alaska gives the following explanation of the problem:

> The most difficult dilemma of CEDC's strategy is that of CEDC versus local control over venture operation. This issue has come to the forefront recently with the instruction by CSA to become self-sufficient in the future. While a venture's current decisions and activities may jeopardize their financial status in the future, CEDC can assume management controls over the venture only after its profitability is affected. CEDC has, in the past, watched ventures become hopelessly mired in their problems before any action could be taken. Then CEDC had to assume control over venture operations to prevent further financial problems. While some decisions may be of long-term benefit to the venture, they may be unpopular on the village level.

Long-range planning also causes impatience with the CDC. Community members are often tired of waiting for results, which, in their past experience with anti-poverty programs, have usually been illusory and realized only in the papers of bureaucratic offices. In addition, dependence on the CDC for loans and grants generates conflicts and resentment. Because community development corporations must coordinate funds from a large number of sources, the issuance of money is subject to the suspicion that only a few insiders are in control. At the same time, the community development corporation is often forced to play a monitoring role in regulating the use of funds, contradicting its mandate as a facilitator of local control.

Often the major problems of CDCs originate with the restrictions and contradictions imposed by government agencies and other funding sources. Funding from government agencies, for example, is often erratic and uncoordinated; it is not issued systematically. In some cases, this forces community development corporations to assume responsibility for coordination which results in conflicts between the requirements of legislative and administrative mandates. Funding which is dependent on policy-making at the federal and state levels generally changes with administrations. As a result, delays in funding or the termination of funds can occur at key periods in program development. Often, projects are also subject to inflexible regulations and bureaucratic red tape that are not constructed to deal with the human situations and crises that occur in the community development process.

Funding problems are often the cause of inadequacies within the internal structure of the community development corporation. CDCs lack sufficient funds for salaries that attract qualified professional staff. At the same time, funding occurs from year to year, and job security is low. Thus, the turnover rate is great, and much time is spent training new staff. Because CDCs are dependent on many funding sources, monitoring these funds (bookkeeping and accounting) is extremely complex. Changes within the political and social environment also present obstacles to the fulfillment of CDC goals. The national recession, for example, has had a particularly devastating effect on poor areas. Lack of employment and capital has increased, leaving a limited resource base for CDCs to build upon.

Despite their problems, CDCs have an impressive number of successful projects. In implementing their programs, CDCs combine many roles and take on new roles at each level of development. The CDC can be described as an intermediary between the community and funding sources: a resource developer, mobilizing colleges, extension offices and agencies to direct their attentions to the low-income populations; a learning center for teaching skills and a new knowledge of the community; and a political representative of the community at the local, state, and national levels, influencing decision makers and affecting policies. In every one of its roles, the CDC is a catalyst for the re-evaluation of policy, the renewal of poor areas, and the rechanneling of resources to communities which most desperately need them.

Title III, Section 303 Grantees, Comprehensive Employment and Training Act

The "303s" are nonprofit, community-based organizations and local-level public entities that receive funding directly from the Department of Labor through Title III, Section 303, of the Comprehensive Employment and Training Act of 1973 (CETA Act). The purpose of Section 303 of the CETA Act is to provide manpower and other services for those individuals who suffer chronic seasonal unemployment and underemployment in the agriculture industry largely as a result of technological advances and mechanization. In order to ensure that migrant and seasonal farmworkers receive the services called for in the legislation, programs developed and implemented under Section 303 are funded directly from the national level, thus bypassing state control. The primary objectives of 303 programs are to provide services and training to seasonal farmworkers who wish to seek alternative job opportunities to seasonal farm work, to provide services necessary to improve the well being of seasonal and migrant farmworkers who wish to remain in farm work, and/or to upgrade the skills of such workers to enable them to take advantage of changing job opportunities in agriculture.

There are nine 303 organizations in California, the majority of which must reapply each year for funds and consequently suffer from the same financial insecurity as community development corporations. The 303s provide services, skill training, and general education. With some exceptions, however, the majority of the skill training they provide is geared to the needs of the nonfarm job market; some courses (e.g., welding, mechanics, business, and English) provide knowledge and/or skills which are relevant to farm employment or would prove useful to an independent small farmer, but are ancillary rather than in the mainstream of farming expertise.

According to a survey conducted by La Cooperativa (California Migrant and Seasonal Farm Workers Council, a federation of California 303s), the 303s reach approximately 5,000 persons per year; 60% are men, and approximately half of the total clientele is between the ages of 21 and 45. Most courses involve a combination of classroom instruction and on-the-job training or work experience. English is frequently offered in conjunction with vocational training, the lessons stressing terminology pertinent to the skill being learned. Instructors are usually bilingual and in a majority of cases come from a farmworker background. Job placement rates vary, but may go as high as 80% to 90%. These rates, however, register only initial job placement, not permanence of employment. Some 303s have fellowship programs for farmworkers seeking opportunities in post-secondary education. This program provides up to $1,000 in fellowship money per academic year, for a maximum of two years.

A major inadequacy of 303s, caused partially by the complexity of regulations to which they are subject, is their concentration on isolated, short-term courses that do not deal adequately with the numerous interrelated needs of the disadvantaged and generally poorly educated target population. 303s have the potential, however, to become involved in "developmental" programs. Currently, for example, 303 money is being used for construction classes related to self-help housing and for projects involved in appropriate technology and solar energy. If they were encouraged by the funding process, 303s could become much more viable vehicles for training people for farm ownership and operation.

Tecnica, Incorporada

Tecnica, Inc., is a private, nonprofit corporation formed by a successful strawberry production cooperative, the Cooperativa Central, for the purpose of providing training to Mexican American farmworkers who aspire to the formation of similar cooperatives. Once farmworkers or sharecroppers themselves, the Cooperativa Central members decided to undertake training on a formal basis when an incipient cooperative requested their assistance and funding was made available from the State CETA Office for a pilot project. This "peer training" project has now ended and appears to have been effective. Not only were the Cooperativa Central members able to communicate the essentials of cooperativism and strawberry cultivation to their peers, but they also leveraged operating capital from a commercial bank for the coop's first year. This innovative new training model for production cooperativism will bear further observation and refinement, but it appears promising as a viable training model.

DEPARTMENT OF LABOR: COMPREHENSIVE EMPLOYMENT AND TRAINING ACT

Rural CDCs and 303s, as well as other private, nonprofit organizations, receive funding for training programs through the Comprehensive Employment and Training Act of 1973. 303s and some CDCs receive their funds directly from the Department of Labor; others are funded by local units of government (Prime Sponsors) or by the California Employment and Training Advisory Office (State CETA Office). Past and present recipients of CETA funds expressed the following criticisms of the program to the Task Force:

> CETA contract negotiations are frequently very slow. This can cause delays in project start-up, which in rural projects can have a devastating effect, given the fact that training is normally geared to the agricultural cycle.
>
> Rural trainees in CETA programs are not allowed to use their own land for on-the-job training, and in some cases on-the-job training has been prohibited on land owned by private individuals or profit-sharing cooperatives, especially when the coop would receive a return from the sale of crops produced through the labor of trainees. Yet in urban programs, the OJT model is encouraged for wage employment, and government funds are used to subsidize (often totally) the learning-training costs of the employer--usually a company with sizeable financial assets of its own. Included in these costs are not only such things as the direct costs of materials and instruction, but also the cost of lost output due to inefficiency on the part of the trainee. Training for self-employment is not contemplated or encouraged in the DOL regulations on use of CETA funds.
>
> Despite the fact that low-income members of rural minority groups frequently have had limited contact with traditional US-style classroom education and/or relate poorly to it, CETA administrators often impose the familiar classroom model rather than experiment with more effective but less traditional training models. Emphasis should be placed on devising atypical formats effective for meeting participating client needs rather than on trying to force these needs into narrow, pre-existing operational modes. In order to satisfy or circumvent CETA regulations, it is frequently necessary for grantees to disguise programs to the extent that they only partially achieve the specific goals toward which the funding administrators will agree to contract.
>
> In rural training programs dealing with agricultural cooperatives, CETA has difficulty comprehending that the democratic processes inherent in cooperative organization can be integrated into training programs themselves, making them more effective.
>
> It is possible that CETA-funded rural training programs will be operated more frequently in the future by organizations whose primary activity is not training. Adjustments should be made in CETA reporting procedures which will enable these organizations to meet basic requirements without having to hire and train personnel specifically

> for short-term but highly specialized paper work. The burden of reporting procedures is currently so great that, without a certain economy of organizational scale, they consume valuable staff time that could better be devoted to training concerns.
>
> The manpower training programs supported by both local Prime Sponsors (city and county governments) and the State CETA Office are normally directed to urban audiences. Consequently, the staffs of the sponsoring organizations tend to be urban oriented in both background and work experience and rarely have a speaking knowledge of pertinent foreign languages. Thus it is all but impossible for them to evaluate training sessions that are not conducted in English or to interview non-English-speaking trainees regarding the effectiveness of training from the trainees' point of view. The ability to communicate with non-English-speaking trainees regarding their opinions of the training program is especially important when the training design is nontraditional. Lack of this ability can result in misinterpretation and biased, superficial evaluative reports. More bilingual monitors from a rural background are needed.
>
> CETA programs generally are evaluated quantitatively, in terms of number of job placements and cost per placement, not qualitatively. This works against rural training programs designed to prepare farmworkers for self-employment since such programs by nature are of longer duration (farm management cannot be taught in two months) and thus cost more per person. Furthermore, the number of trainees in any given program may be small, given the fact that seasonal work, when available, is more lucrative than training stipends. Also, the long-range speculative prospect of self-employment is viewed by many eligible enrollees as well as many CETA administrators as too great a risk to take.

The Task Force believes that, in promolgating regulations concerning the implementation of CETA, the Department of Labor should encourage rather than discourage nontraditional training modes, learning for self-employment, and training by small, specifically focused organizations which may not be sophisticated in bureaucratic reporting processes. Regulations should include a stimulus for the National Office of DOL (303 funding), for the Regional Offices of DOL (Prime Sponsor funding), and for the State CETA Office (state funding) to utilize a more effective delivery system for the training of small farmers with CETA funds.

Another area in which CETA policy changes would be beneficial is the relationship of CETA training stipends to welfare payments. Current regulations require that welfare recipients who receive more than $30 a month from CETA must have their welfare benefits reduced on a pro-rated basis. This in itself is not unjust to the CETA trainee in terms of his overall income (unless he has left a more lucrative part-time job in order to be trained). However, it is the Task Force's opinion that CETA's limited funds could be stretched farther--perhaps to people above the poverty line who need and desire skill training but cannot stop work to obtain it--by allowing welfare funds to be paid during training instead of CETA stipends. Full or partial welfare payments could also be used to subsidize small farmers in the first difficult year or two of independent farming when their capital investment and operating expenses are high and their gross income is relatively low. The Welfare Department, however, considers all loans except deferred payment loans (e.g., student aid loans) as income and reduces welfare benefits accordingly. Welfare payments are also affected if a farmer is making payments on a farm mortgage. Such equity is considered a resource, and the total resources for a household cannot exceed $1,500 (or $3,000 if one of the parties is over 65) without disqualifying the family for welfare.

PRIVATE SECTOR RESOURCES

Small farmers obtain much of their "training" through information provided by the people with whom they do business: bankers, sales people, brokers, market buyers, custom operators, and others. These people make a living providing services or products to the farmer. Because of the many technical aspects of the agricultural industry, the farmer is often very dependent on service representatives in order to finance, grow, and market his agricultural product. These service representatives profit in relation to the quality of service rendered; if they do not provide adequate service, they usually do not stay in business. The technical advice and resources they provide sometimes seem more relevant and helpful to the farmer than services provided by public institutions because he pays for them.

The farmer characteristically needs large quantities of money at irregular intervals. Often he must incur a large debt in the hope of getting a good return at harvest time. In order to plan for the correct amount of money at the right time, yearly cash flows and payment systems must be worked out. Most banks and commercial lenders have employees experienced in helping the farmer with them. Many larger banks have computerized data systems on the income and costs of most crops in California. Banks also have field appraisers that inspect crops, water, and land and advise on prospective business adjustments or ventures.

Sales people for farm inputs such as fertilizer, pesticides, equipment, etc., usually know and are able to recommend local cultural practices, brand names, and quantities of a given product to improve the condition of the farmer's crop. Since most farmers establish themselves in a given geographic area, the sales person has the incentive to provide reliable service so as not to lose a long-term customer. A good sales representative learns to made good recommendations and encourage the use of new products that can cut costs and improve yields. Because there are usually several distributors in a farm area that provide the same products at the same cost, the field representative that can gain the trust and confidence of farmers tends to make more profit than a competitor who does not.

The profit of a broker or buyer is dependent on the quality of a farmer's produce. The better the product, at the right time, the more both the farmer and the broker earn. For this reason, many brokers employ field representatives to ensure the quality of the product. Because of their sales experience, these field representatives can advise farmers when and how much to plant and can provide other information needed to market a crop profitably. Buyers or brokers will often give crop loans to their farmers or use their influence to help them obtain commercial loans.

Most resource people in the private sector do their work for profit. They often charge as much as competition or the farmer's willingness to pay will allow. Private services are usually more costly per acre for the new small farmer than for the experienced or larger farmer because the inexperienced farmer often does not know what the fair price is for a given service. However, if the small farmer has the funds, the services he purchases with them can be well worth their cost, even if overpriced.

MEDIA (radio, television, movies, audio-visual aids, publications)

Radio, technical publications, and audio-visual aids have been employed for many years by growers' associations, the USDA, the Cooperative Extension Service, and others to transmit information to farmers. The radio is used most often for market quotations and other timely information, while pamphlets and longer publications generally treat new farming or family-resource management techniques. Audio-visual aids are commonly used in group training situations.

The members of the Task Force, however, have noted numerous weaknesses and inadequacies in the development of instructional materials (pamphlets, charts, film strips, films, etc.) for small-farmer training. Such materials, especially those of the print media type, frequently fail to reflect the technology available for their production, and consequently they are drab in presentation, conceptually inadequate, and inconsistent in identifying behavioral competencies as outcomes; they use overly sophisticated language in relation to apparent objectives, seldom are bilingual, etc. Such qualities are especially characteristic of training materials for nonformal education, an area in which publishers are seldom active and quality control measures by reviewing bodies are uncommon. Although materials in other languages, especially Spanish, are extremely scarce, the problem of producing them is more complex than simply translating from English. For example, efforts must be made to adapt materials to the vernacular of a particular population, and subsequently such materials should be field tested to verify their suitability and effectiveness. To emphasize this last point, instructional materials should be prepared in ways which make it possible to evaluate their stipulated effect within a particular population.

CONCLUSIONS REGARDING TRAINING RESOURCES

It is clear from the training needs assessment contained in Section II of this report that the training requirements of present or aspiring independent small farmers can include the totality of agricultural skills, management skills, and life skills, or only selective segments of these general areas, depending on the entry point of the individual. Only for in-school youth, from high school through community college and the university, are resources to fill the needs of the identified client population adequate. Ironically, available agricultural jobs frequently go not to technically qualified high school and community college graduates, but to less qualified, older adults. Further, it is all but impossible for the aspiring young farmer to break into agriculture as an independent entrepreneur, regardless of how well prepared he is, unless his parents are able to divide a family farm or provide financing to accommodate his needs. Commercial financing for land purchase or rental is simply not available unless the candidate has a solid track record in both farm management and agriculture, things that most young people and even experienced sharecroppers and farmworkers can rarely document.

Training resources available to out-of-school adults are extremely limited in comparison with the size of the potential client population. Within the public education system, the community colleges and Regional Occupational Programs and Centers have the greatest flexibility to design courses appropriate to the needs of out-of-school adults, many of whom do not speak English, have a limited formal education, and may be only marginally literate or illiterate. While the community colleges and ROP/Cs do have a mandate to serve out-of-school adults and to employ bilingual instructors if needed, a communications gap exists between them and their rural public; this gap must be closed before they will be able to satisfy the agricultural training needs of this portion of their clientele.

Private, nonprofit organizations are also well equipped to serve the needs of out-of-school adults, especially those from minority groups. Some, such as community development corporations and the pilot Tecnica, Inc., can perform an organizing function and also coordinate a variety of community resources, thus achieving integrated programming.

For the established small farmer, private-sector resources such as lending institutions and commercial operators are an important source of ongoing informational inputs, providing he has the sophistication to evaluate conflicting recommendations. The Cooperative Extension Service should be an equally valuable resource, and it does in fact serve the needs of those small farmers capable of seeking out its agents. Unfortunately, many small farmers are unaware of the services that the Cooperative Extension Service can provide them. Very few extension agents are currently employed specifically to identify and service small farmers through on-the-farm orientation, group meetings, and experimental plots demonstrating principles of agriculture scaled down to their needs. The decision-making process in the university should be examined to determine how policy can be influenced to reflect greater attention to the needs of the small farmer and to encourage implementation of appropriate programs by the Extension Service.

General inadequacies that seem to appear most frequently in existing training programs for out-of-school adults are:

- lack of outreach personnel to identify marginal small farmers or farmworkers, who rarely join interest groups or organize themselves spontaneously;
- limited integration of community resources;
- lack of flexibility in curriculum and scheduling (generally imposed by an institution's governing regulations);
- lack of bilingual capacity;

- limited attention to program evaluation; and
- total lack of cost-benefit analyses.

Dealing with these institutional inadequacies is in itself difficult; it can be seriously argued that it would be better to create alternative structures rather than put up with the slow process of institutional change.

Despite the limitations of existing training programs, both programmatic and in terms of potential clients reached, they currently prepare more individuals for self-employment as independent small farmers than can obtain land and financing. The consensus of opinion among Training Task Force members is that a top-level decision must be made in California to adopt a policy and establish implementing mechanisms to make land, financing, and education available to small farmers, simultaneously, equitably, and in an appropriately integrated fashion. Adoption of such a policy would require subsequent relaxation or revision of the many regulations that currently restrict the innovative use of public funds for small-farmer training. Redirection of existing funds alone will not be sufficient, however; new funding will also be necessary.

IV. TRAINING TASK FORCE RECOMMENDATIONS

The Training Task Force has identified the following qualities as characteristic of small farmer training programs that appear to promote successful transfer of information leading to subsequent behavioral changes, regardless of the educational level or sophistication of the audience:

- The training is responsive to specific student needs and is relevant in terms of economic betterment.
- Training is easily accessible, with performance standards realistically set.
- There is ongoing assessment of progress and adaptation, as needed, to changing contexts and group needs.
- Included in the training format are mechanisms for trainee inputs into planning and the ongoing evaluation process.
- Training inputs are interspersed with or simultaneous to actual farming activities.
- The training environment is nonthreatening and preferably realistic (e.g., on-farm); theoretical discussion is kept to a minimum.
- Communication takes place in the trainees' native language, in terminology appropriate to their educational background and experience (a less desirable but acceptable option is simultaneous translation).

- Written materials are also in the trainees' native language.
- Instructors come from the same general background as the students or are sympathetic to it.
- All mature family members are included in the instructional program.
- The trainees are motivated by felt need rather than the prospect of receiving living allowances during the period of their participation.

Priority of access to advancement in the rural socio-economic system presents the moral question of who is most "worthy" of the public's investment in training: the well prepared product of this country's formal education system who needs little to become a viable farmer besides land, financing, and selected information which he himself can ferret out by calling on his local community resources, or the person at the opposite end of the small-farmer spectrum, the non-English-speaking, minimally educated ex-farmworker who has spent his life raising the food we eat but needs information on nearly every aspect of agriculture and agricultural economics if he is to survive as an independent farmer.

It is the Task Force's conviction that both groups, as well as those whose background and experience place them somewhere between the two extremes, must have access to the skills and information they need. This implies a general commitment on the part of the public sector to augment the educational services provided specifically to small farmers by three major entities: community-based organizations, the formal education system, and the University of California Cooperative Extension Service and agricultural research program.

> Community-based organizations have the greatest capability to service the least prepared segment of the target population, the mono-lingual former farmworker.
>
> The formal education system, especially the community colleges and the adult education and Regional Occupational Programs/Centers in the secondary schools, has the potential to serve this group and also the more advanced middle-level farmer group through special and regular courses.
>
> The University of California Cooperative Extenstion Service can best be utilized as a resource by those who have learned elsewhere the basics of crop production, marketing, management, and fiscal administration and hence have the ability to define their needs and seek out ongoing technical assistance.

Commitment to a program such as this would effectively implement the concept of lifelong learning. While the complete training of the least prepared segment of the target population would be costly, the expense would be balanced by public commitment to augmented services for more advanced small farmers from the formal education system and the University of California Extension Service and agricultural research programs.

Because of the diverse nature of the target group with regard to educational level, farming experience, ethnic origin, etc., the Task Force has developed a separate set of training recommendations for each of five major segments of the small-farmer or aspiring small-farmer population:

1. Present small farmer, marginally successful economically, or farmworker desirous of becoming an independent small farmer; non-English speaking; limited formal education (possibly semiliterate or illiterate); experienced in several or all phases of crop production but poorly versed in farm management, fiscal administration, marketing, etc., especially in the United States: (Note: recommendations are listed in descending order of importance.)

   - In order to be meaningful, training programs must be integrated from the beginning with financing mechanisms for land and production capital and with marketing programs. The low-income, non-English-speaking farmer relates his problems more to lack of resources (access to credit and markets) than to lack of knowledge. Hence he will respond more positively to training and technical assistance if he is actively engaged in farming (whether on his own land or on a teaching farm) and if the educational inputs are geared to his ongoing need for knowledge than if he must deal with hypothetical situations.

     Training programs that operate on the assumption that educational inputs alone are sufficient because they will provide the farmer with the credibility necessary to obtain private or public sector financing in the future may be deceptive, for they carry no guarantee of financing, and, even if he is financed, the small farmer may lose everything because he lacks practical experience (unless the financing agency provides supervised credit, which few do at present). Furthermore, without control over his access to markets, the farmer may make little or no profit regardless of how well he manages his money.

   - Training must be conceptualized as a long-term undertaking, of at least two or three years' duration, allowing the farmer to walk through the financing, cropping, and marketing cycles several times under direct supervision. In the process he should learn enough about community resources to be able in subsequent years to seek out the information he needs from the Extension Service, banks, businessmen, and public or private agencies.

   - Training programs should be designed to provide a subsistance allowance for as long as the farmer needs it, *i.e.*, until his own cash flow from agricultural production becomes adequate to support his family. The subsistance allowance, or stipend, is a social investment that supplements other family income for family support during the first crucial years when the farmer is acquiring the skills that will enable him to increase the economic viability of his farming operation and hence become eligible for private-sector financing. Athough expensive, a long-term training program with subsistance allowances will ultimately benefit society by reducing pressure on social services, increasing agricultural production, and broadening the community tax base.

A small farmer should not be excluded from training or access to subsistance allowances if his income is above the government determined poverty line or if he has an equity investment in land or equipment. Rather, a flexible system of subsistance allowances must be devised that will supplement each participant family's income to the extent necessary in order to provide a total amount representative of a moderate income. Only under such circumstances can a farmer devote a period to full- or part-time training rather than solely to income-producing activity.

Similarly, a skilled farmworker, can afford to give up a good job and live on a subsistance allowance while preparing to become an independent farmer only if the training program promises access to financing at the end for land acquisition and operating capital, or if he simultaneously receives agricultural financing so that he can actually begin farming while in training.

A combination system could be developed involving private-sector bank loans for participants already making moderate incomes and individually determined allowances for low-income participants. The allowance or stipend system should also be coordinated with the existing welfare payment system toward the end of making more positive use of available welfare funds.

- All candidates who show sufficient motivation for farming should be considered acceptable for participation in training programs. However, the institution providing the training and ultimately accountable for its outcome should retain the right of final acceptance of candidates, especially if individual or group credit from a private bank or a public agency constitutes an element of the training package.

  If the recipient group is a functioning or incipient cooperative, the provider of training should base its acceptance of the group on the existance of a solid and committed core membership; identification of additional participants should be the responsibility of the core group.

- Training programs should emphasize the need that small farmers have for cooperative action, especially in the area of marketing, if they are to compete with large growers. Cooperatives are particularly important to small farmers when they are just getting started and are especially vulnerable to shrewd middlemen. Once they understand the advantages and disadvantages of the various marketing options open to them in addition to the cooperative, they can move out on their own if they wish, opening a place in the coop for the more recent entrants into farming.

- Training programs must have a bilingual capacity for the benefit of the non-English speaker but should also include ESL keyed to the subject matter being taught.

- Training programs should have the capacity for outreach, to identify small farmers and to learn from them their needs.

- A state policy should be established for the preparation and publication of basic, learner verified, instructional materials pertinent to the needs of small farmers in the native languages of all significant segments of the small-farmer population.

- Increased use must be made of appropriate instructional hardware, along with appropriate software developed locally (e.g., slides, tapes, movies).

- Because of the present shortage of bilingual trainers capable of relating effectively to the client population, programs must be developed to prepare trainers and give them professional status. Consideration should be given to accredited internships or apprenticeship programs with the Cooperative Extension Service, community-based organizations, unions, successful ranchers, successful cooperatives, etc., in affiliation with high schools, community colleges, and universities. More extensive use should be made of the peer training concept. Such efforts would take advantage of existing human resources uniquely equipped by virtue of their ethnic background or personal inclination to serve effectively as trainers.

- An effort to integrate the programs of all the following entities and at the same time link them to financing sources is necessary:

  a. Community-based organizations (community development corporations, 303s, other private, nonprofit organizations)

Community-based organizations are effective at both rural community development and the provision of training and technical assistance to the small farmer population. The training funds used by these organizations are largely from federal sources, especially the Comprehensive Employment and Training Act (CETA Act) of 1973, Titles I and III, and hence subject to federal regulations. A study should be made to determine in what ways these regulations can be relaxed in order for CETA funds to be put to the most efficient use in rural self-employment training programs as opposed to traditional job-placement programs.

While CDCs have the advantage of having their own economic development funds, these funds fall far short of the credit needs of small farmers. Hence it is imperative that other sources of financing be made available, with CDCs playing a technical assistance role as new or struggling small farmers gain access to development capital while involved in training.

To strengthen the efforts of community-based organizations, under-funded or poorly organized groups should have access to larger networks of information exchange and technical assistance. Their own training and assistance to small farmers could then become consistent with that of the stronger programs throughout the state.

b. Community Colleges, Regional Occupational Programs/Centers, and Adult Evening Schools

Of the several institutions in the formal education system, the community colleges and Regional Occupational Programs/Centers have perhaps the greatest flexibility to set up training capable of meeting the needs of the struggling, non-English-speaking small farmer and new entrant, including intensive courses during the agricultural down season and short courses year round.

Like high schools, community colleges have a local tax base and hence are inclined to respond favorably to pressure from the rural community for training, if they have the necessary expertise. As a training resource they have the additional advantage of providing regular courses into which the more enterprising small farmer can cycle when ready, if he so chooses. The only area in which community colleges fall short is their ability to muster funds for the additional staff required for special courses. Hence it is recommended that a permanent source of funding be made available on an as-needed basis from public funds for manpower training so that community colleges can respond more effectively to the educational needs of the rural community.

While ROP/Cs and adult evening schools claim to have limited access to funds for expansion of their somewhat limited agricultural curriculum, they could provide effective instructional programs if sufficient priority were placed on the educational needs of small farmers. The ROP/Cs have excellent flexibility to conduct almost any needed vocational training program in a community. State and local school officials should collaborate in developing training programs to meet the needs of small farmers in areas served by neither an appropriate community-based organization nor a community college.

c. University of California: Cooperative Extension Service, Agricultural Research Programs, Colleges and Universities

The Task Force believes that the University of California should establish a policy of greater responsiveness to the needs of small farmers, both in its research priorities and in the work of the Cooperative Extension Service. An assessment should be made of the present work of agricultural experiment stations and universities, and also of the potential of the polytechnic colleges for appropriate research.

At the level of the least prepared segment of the small farmer population, the Cooperative Extension Service is effective in identifying candidates for training, determining their needs, and serving as a communications link between training institutions and their clientele. Farm Advisers should follow the progress of training programs and assume increasing responsibility for on-the-farm follow-up as the direct training component diminishes, eventually taking over full responsibility when it ends. This implies an augmented staff, bilingual, with a mandate to work with small farmers. The Task Force therefore recommends that the University of California allocate additional funding for bilingual staff to Farm Advisers' Offices located in areas that have a sizeable population of non-English-speaking small farmers. This staff should be composed of both agricultural extensionists, including individuals to work with 4-H programs and home economics, and secretaries, the latter to greet non-English-speaking clients and assist them in obtaining the information they need if the extension agent is not available for consultation.

2. Present small farmer, marginally successful economically, or person who desires to enter independent farming, conversant and literate in English, experienced in one or all phases of crop production, but not well versed in farm management, fiscal administration, or marketing.

   This individual would fit into the same training program as that outlined for the preceding segment of the population, without need for the instruction to be in a second language.

3. Present small farmer, marginally successful economically, or person desirous of entering independent farming (e.g., son of a farmer or farmworker or graduate of an agricultural course in high school or college), conversant and literate in English, experienced in crop production and reasonably well informed regarding farm management, fiscal administration, marketing, etc.

   The major problem of this segment of the largest population, like all other small farmers, is access--to land, financing, technology, and markets. Sources of long-term developmental loans must be made available in order for these farmers to get a strong start in agriculture.

   The individual in this group should be able to assess his own educational needs and find means of satisfying them. He can take advantage of the existing formal education system--universities, community colleges, ROP/Cs, and Adult Evening Schools--for any additional source instruction needed. The Cooperative Extension Service and other community resources should be able to fulfill day-to-day requirements for specific information. The Extension Service, however, must augment its staff and adopt a policy of serving small farmers on an equitable basis with large farmers.

4. Young people still in high school, enrolled in vocational education courses with the intention of becoming independent small farmers as soon after graduation as possible.

   The following changes are recommended if high school vocational education courses are to prepare young people in establish viable farming operations: class size must be reduced; time and resources must be provided to develop personalized individual learning plans for students and to develop a system of evaluating student performance; time must be provided for teachers to visit students at home, to give them assistance and supervision in their individual projects; and funds must be earmarked specifically for vocational education in agriculture. Outreach will also be necessary to attract more minority students, including the provision of special counseling and the hiring of more bilingual teachers.

5. Aspiring small farmer without previous agricultural experience, of sufficient social sophistication to understand how the socioeconomic system functions at the local level (e.g., back-to-the-landers or urban dropouts).

   This segment of the client population would need a more extensive training program than the individual with a strong background in agriculture, but it could be much more intensive than the program outlined for the individual with limited formal education and a language barrier. Unless a large number of this type of new entrant into agriculture were settled in a geographic area, it would be difficult for the community colleges to meet their needs. Rather, they should sharpen their knowledge of local agricultural resources and undertake an intensive self-education campaign, taking advantage of every resource available (*e.g.*, the Cooperative Extension Service, public and private agencies, businessmen, bankers, libraries, experienced farmers, etc.). As a possible learning mechanism they should consider apprenticeships or an initial period of employment with successful farmers.

The Task Force's final recommendation is that a mechanism for information collection and dissemination be established for small farmers. It is extremely difficult for any one person, whether Farm Adviser, community college instructor, or trainer in a community-based organization, to stay abreast of every new development of interest to his small-farmer or potential small-farmer clientele. It is even more difficult to make such information readily accessible to small farmers. A mechanism is necessary to disseminate information to individual or institutional subscribers through publications in both English and other languages, with community-based organizations providing information more specific to local needs. In more advanced stages such a mechanism could even provide computerized market data and business management services. Development of such a mechanism should be supported by public funds. Equally important is the evolution of networking among community-based organizations throughout California, including both intermediary groups such as CDCs or 303s and client groups such as small-farmer cooperatives. The existence of such networks would facilitate the exchange of information and would create a power base for advocacy of small-farmer interests and needs.

Note: Attached are statements of recommendations by individual Task Force members.

DRAFT RECOMMENDATION
FOR A TRAINING MODEL
SMALL FARM VIABILITY PROJECT

The Training Task Force proposes a locally-based rural opportunity center to meet the various needs of a small farming clientele ranging from the monolingual farmworker with little formal education to the post secondary student of agriculture. It will encompass four major functions. First, the model will be a center for integrating existing resources, and for providing its own land and facilities. Secondly, it will serve as a bridge between the small farmer and information available from educational institutions and the Cooperative Extension, as well as provide supplementary material. Such material will include marketing, technological and production developments which is often not translated into Spanish or geared toward the needs of small farmers. Third, it will provide linkages between small farmers and cooperative members with larger cooperative and marketing networks to strengthen self-sufficiency and communication. Fourth the center will serve as an interface between its clientele and the financial and technical assistance necessary for farmers to gain ownership and management in their farms as well as in the broader community. Thus, emphasis will include an enablement of the social development of the rural community, along with the development of new opportunities in farming.

To accomplish these functions, each center will include a library, a facility for meetings, and land for ag training and demonstration. The staff will include outreach workers, a coordinator with larger statewide organizations, and translators and researchers to obtain and translate material as it is needed. Staff training will be particularly important in the relatively new field of delivering services to small farmers. The staff, for example, must be aware of groundwork already laid in their region--the resources available, and the advisors, educators, growers and commercial agents who can work with them. The staff, through outreach work, should be able to identify the farmers being served by these resources, and the farmers "left behind" because of cultural isolation, lack of English-speaking ability or the inaccessibility of the resources themselves. Finally, the staff should know ways to enable the farmers' integration into this larger technical assistance network through organization, discussion, and the dissemination of information. They will draw from a library including resource directories, marketing strategies and management systems--subjects often lacking in cooperative extension literature--in addition to translated technological and production information.

The center will emphasize the concept of life-long learning: the availability of appropriate resources and training at any level of the farmer's development, and will coordinate with educational institutions who have incorporated this concept in their curriculum. The staff will, for example, encourage the short courses provided by community colleges on a year-round basis, particularly in the agricultural off-season. At the same time the center will collaborate with adult evening schools and the ROP's and ROC's existing in the area. The resources of the center will be available for instructors from these institutions, including information and curriculum to be distributed to the students. Land will also be available for experiential learning and demonstration.

The staff will direct their work with beginning farmers toward preparing them for taking advantage of the resources that exist. Training would include an identification of the structures available to farmers for combining skills and resources at some or all levels of operations. Training, aligned with an actual farming venture, ensures that the trainee has an economic stake in his/her work and learning. A structure for farming such as the production cooperative entails a transfer of knowledge between members which is often far more effective than external instructions. Under these circumstances training is directed toward problem-solving through a group process. Leadership qualities are recognized and management skills are emphasized as the group moves toward independence, and an ability to depend on the resources of the Extension Service, the commercial sector and the educational system. The presentation of marketing strategies and networks available to these farmers will further catalyze their integration and ability to compete in the larger agricultural community.

The center will include a system for maintaining the income of the farmer during the training phase. For example, stipends will provide support in the years before the farmer gains sufficient income from bank loans or crop revenues to survive as a farmer. The system will also include an alignment of the regulations of the welfare system with the needs of beginning farmers whose equity in equipment should not prevent him from receiving benefits for his family. The issuance of these benefits will be regulated by a screening process with criteria directed toward determining the motivation of prospective trainees. In the case of the cooperative, screening of new members will occur from within the group, after they have set their criteria.

As the client groups need credit and financing they can apply through the coordinator at the center to the Statewide financing organization. The coordinator will assist them in compiling a financial package. At the same time, he will evaluate with the rest of the staff, and the farmers, the effectiveness of the training provided, and the skills still necessary in management, organization and production for credit and funding to be received. If the rural opportunity center, the local community-based organizations, educational institutions, and Cooperative Extension are unable to fill these gaps, the coordinator will have access to state and federal resources and to the expertise to use them effectively.

A SYSTEM FOR TRAINING SMALL FARMERS

The Veterans "Instruction on the Farm" training system, which was used after World War II, could be utilized to train small farmers. The following conditions would have to be present:

1. Available land
2. Available financing
3. Individuals desirous of becoming small farmers
4. An up-front commitment by government to make small farming viable.

Local education agencies--either secondary districts, ROP/Cs, or community colleges would conduct small farmer "Instruction on the Farm" programs. These programs would operate basically as follows:

A group of ten to 15 individuals would be identified for enrollment. An instructor would be employed by the local education agency. The instructor would be bilingual if students enrolled had need for bilingual instruction. The instructor would design with each student a personalized instructional program that would include evening and Saturday classroom, laboratory, and shop instruction, plus individual on-the-farm instruction during the week days. The duration of each student's program would vary depending upon his personalized learning plan and his ability to demonstrate predetermined competencies. The program would operate on a year-round basis. After the student had completed the program, he would continue to receive assistance from the appropriate Cooperative Extension Agent.

The cost of the program (at 15 per class) would be approximately $2,000 per student per year. It is estimated that each student would require, on the average, two full years of instruction. Existing ADA formulas might cover one-third of the cost, with the other two-thirds having to come from other sources. It would be necessary for the student to receive stipends or living support payments while engaged in the training program. This funding would have to be provided for and would add considerably to the total cost of the program.

This system would be appropriate for training the small farmers. Students currently enrolled, or eligible to enroll, in secondary school programs could enroll in existing vocational agriculture programs. To fit a small farm concept, however, considerable change in curriculum would have to occur. Bilingual capabilities would have to be provided, and outreach programs would have to be conducted. There is currently little incentive in the secondary school systems to do these things. The existing system for allocating federal vocational education funds shift most of the funds to urban areas. There is no funding earmarked for agricultural education. Class size in most secondary vocational agriculture programs makes it impossible to provide the individualized instruction necessary for successful completion.

Appendix C

COMMUNITY COLLEGES AGRICULTURE PROGRAM
TRAINING FOR SMALL FARM OPERATORS

The most important requirement in establishing an educational program for the small farmer group is to have a local director of agriculture that has an interest and a desire to provide educational programs such as the small farmer group needs. After the director has been convinced that the program is needed he, or she will contact the administration. With the approval of the administration, the director will proceed to implement it.

In order to meet the requirements for an ideal type training program for small farmers, it would be important for the college to line up a group of instructors (part-time) to do most of the teaching of the required courses. Someone in the college would need to review the requirements of the students to be served and draft a short term and long term plan to serve these needs. It would be imperative that a budget for the overall program be prepared. This would point out the need of additional funds required to make the program successful. Chances are that some type of facilities would be needed away from campus (located on farming acreage). This would in many instances, require additional equipment. In addition to the part-time instructors, a coordinator would be required to maintain continuity of the program and recruit students. Teacher aides should be available for classes that require a great deal of supervision, preparation and maintenance of equipment. Some arrangement would have to be made to supplement funding due to increased costs of those that were hired. This would be in addition to the amount of ADA that would come to the district. Over a period of time, all of the subjects requiring training could be done by the Community Colleges. Additional educational courses could also be taken on campus by the students, once they have found that educational opportunities do exist and are obtainable.

It should be understood that there are some areas where Community Colleges are not available, or if available, do not have the expertise to carry out the program. In this instance, an adult school connected to a secondary district or an ROP might be available. It is important that the target group be identified, then the educational requirements could be worked out through planning and cooperation between agricultural staff at both the state and local level.

TECHNOLOGY TASK FORCE

FINAL REPORT

Small Farm Viability Project

November 1977

ABSTRACT

TECHNOLOGY TASK FORCE

Under conditions of present agricultural technology, family-size farms can be economically viable and profitable even when they are not "optimal." The evidence indicates that their production costs approximate the production costs of larger farms. The most recent data shows that family farmers tend to achieve lower unit production costs than do larger farmers in vegetables, fruits, and nuts (crops raised by most of the State's family farmers). Larger farmers, on the other hand, achieve slightly lower unit production costs in cash grains. The main competitive advantage enjoyed by large farms is not lower costs, but higher incomes through greater gross sales per acre. The reasons for this income differential are not clear from the data, but experience and the literature suggest that it stems primarily from a favored position large farms have in marketing their products. This implies that the small farmer probably is disadvantaged less by technological factors than by institutional factors.

The task force estimated approximate acreages needed to produce $15,000 of income to a family for different agricultural commodities. Two data bases were used to derive these estimates:

1. University of California Cooperative Extension cost sheets. These figures assume (a) 1975 prices, and (b) the family contributes all the labor. It appears from them that a $15,000 income is obtainable on 50 acres of most vegetable crops or 60 acres on most fruit and nut crops. To the extent hired labor is used, the acreage must be expanded.

2. 1974 Census of Agriculture for California. These figures assume (a) 1974 prices, and (b) the family contributes only 1.5 worker years of labor, hiring the rest. These data suggest $15,000 could be earned on approximately 59 acres of vegetables, 100 acres of fruits and nuts, or 144 acres of irrigated cash grains.

The years 1974 and 1975 were characterized by strong commodity prices. Substantially lower prices would correspondingly reduce or eliminate income from these acreages. Prices are very important to family farm viability.

Although more efficient use of modern agricultural technology does not account for most of the competitive edge enjoyed by large farmers, it does account for a part of it. For example, large farms achieve lower per unit costs in their use of machinery and fertilizers. If small farmers could improve their relative efficiency in utilizing modern agricultural technologies, they could to some extent improve their overall competitive position. This is particularly true of mechanical technology, where the development of versatile equipment appropriate to small acreages and of practical arrangements for spreading equipment use between farmers could have major economic benefits. Other technological areas in which solutions need to be found for small farmers include pesticides and

fertilizers, integrated pest management, plant breeding, irrigation, post-harvest cooling, farm management, and cooperative organization.

The University is the main publicly supported institution developing agricultural technology. Therefore, it would be the principal focus of policy aimed at developing technology more applicable to small farms. The task force recommends:

A. University research on farm technologies:

1. The university should establish a new set of goals which emphasize a commitment to the welfare of smaller, family farmers, farmworkers, and rural communities.

2. The hiring, firing, and promotions of researchers should be based upon explicit recognition of the researcher's performance on work related to these new goals, as well as to traditional goals of departments.

3. Annual public disclosure should be made of all current research activities of the Experiment Station.

4. Discretionary funds should be allocated specifically for the purpose of encouraging researchers to undertake new, and perhaps risky, types of research dealing with small farm technology and related issues.

5. The present use of private funds from interested agricultural industries for particular kinds of research should be subjected to a strict review process.

6. University teaching responsibilities should include practical instruction in farm management and production techniques applicable to the family farm.

B. Cooperative Extension Services:

1. The allocation of extension research and support activities should be subject to new goals and priorities similar to those described in recommendation A. 1.

2. The concept of farm advisors to help serve small farmers, piloted under Title V of the Rural Development Act, should be further developed.

3. The Extension Service should develop a more holistic perspective of the farm as a complete system.

4. Cooperative Extension should offer advice on organizational technologies which allow the individual farmer to plan and cooperate with other family farmers in the production and marketing of his crops.

5. The Extension Service should actively help devise delivery systems of agricultural services which do not discriminate against the small farmer.

6. Important information documents should be printed in Spanish as well as English, and there should be more Spanish speaking agents.

C. The Department of Food and Agriculture

1. The Department of Food and Agriculture should establish a unit to assess the impact of various regulations on the viability of smaller farmers.

2. The Department of Food and Agriculture should collect information on the planting and harvesting of all specialty crops commonly grown by small farmers.

D. Government Price-Setting Agencies:

Agencies influencing or regulating commodity prices should establish pricing policies that will include an objective of protecting family farmers.

FINAL REPORT

TECHNOLOGY TASK FORCE

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I. INTRODUCTION

The question before this task force has been: "Are there ways in which agricultural technology could be modified to allow family farmers a better chance for survival?" The following report represents the conclusions of a year-long series of discussions, interviews, and examination of the limited research available on the topic. It is concerned both with the thousands of families whose current main source of income is the farm and with the would-be farmers who would like to find a place in agriculture.

FAMILY FARMER DEFINITION

The task force has been concerned primarily with those small farms which are able to produce efficiently, which can participate fully in modern commercial agriculture, and which are capable of providing adequate income to support a family whose full-time efforts are devoted to farming. Such farms may be owned and operated independently by a family, or they may be organized cooperatively so that ownership is dispersed over several families who jointly make production decisions and who provide the labor for the farm. Within this broad category of "family farms" there are several important criteria which distinguish those farmers which are the focus of this report:

1. We are concerned with farm operations that are both owned and operated by the family and which use relatively little hired labor, hiring mostly for peak harvest needs. This eliminates from the discussion farms which are owned by a family, but which are run primarily with hired management and labor. However, it recognizes that certain important California crops make seasonal labor demands that cannot be met with family manpower.

2. We are especially interested in those serious family farmers who presently are being squeezed out of agriculture or who wish to gain entry into farming. There is a group of prosperous farmers who meet our family farm criteria, but who are earning high incomes and who have large equity investments in their farms. We would like to see more family farmers achieve their level of prosperity, but the task force exists to deal with those experiencing major problems. Therefore, in the following discussion, we have focused our analysis and recommendations on farms which yield a net income of $15,000 or less for the farm family.

3. Most of our attention has been devoted to the problems of crop farmers, neglecting dairy, livestock, and poultry producers. Choices were necessary because of the limited time and resources of the task force, and a particularly large portion of family farms are crop farms. Also, the task force believes that crop production offers the most likely entry into farming for families with limited resources. However, we recognize that there are significant numbers of farmers who are not crop farmers, and they clearly merit the attention we have not been able to give to them. We believe that most of our recommendations are applicable to many family farms not specifically included in the analysis.

There are approximately 36,000 crop farms in the state, of which about 77% produce less than $100,000 each in annual sales. It is likely that the majority of farms in this sales category provide $15,000 or less to the family in income. A typical farm in this group is owned by a family (perhaps through a family corporation), and the operator hires about the same amount of labor as he contributes. It is likely that between 5,000 and 12,000 farms in this category are owned by persons who make most of their income from nonfarm sources, but who also work the farm. Census data does not permit accurate identification of such farms. However, the task force considers farmers who supplement their income with off-farm work to be part of the family farm population. The urban investor is explicitly excluded. We estimate that our definition encompasses somewhere between 18,000 and 25,000 family farms (which is between 50% and 70% of all crop farms) producing about $600 million in crops (which is 12% of the total California crop production). Thus, even though we have been quite restrictive in our definition of the family farm, it includes a majority of all the crop farms in the state.

Farmers within this group have diverse interests and needs, which causes difficulty in discussing in general terms the problems of all family farmers. We have found it convenient to think of two types of family farmers. The first type produces mostly field crops, operating a highly mechanized farm which employs relatively little labor. The second kind produces primarily fruits and fresh vegetables, relying less on mechanization and more on hand labor. In this latter group we devote particular attention to "limited resource" farmers trying to gain a foothold in agriculture through production of high value crops which do not require extensive land or equipment to produce an adequate income.

Occasionally the reader will encounter a reference to "industrial farms." As used in this report, the term denotes farms characterized by a separation between the functions of ownership, management, and labor, just as large nonfarm businesses are structured. Normally farms of this type tend to be quite large.

II. THE PROBLEM

Frequently it is stated that the technology of modern agriculture is of such a nature that it favors large scale farming and penalizes smaller scale enterprises such as the family farm. This means, it is claimed, that large farms are more competitive than small farms because they are economically more efficient in making use of profitable, sophisticated technologies. More specifically, it is commonly asserted that large producers gain most of their advantages by achieving lower unit production costs through "economies of scale."

Is this true? Is it possible for the small farmer to produce at a cost competitive with larger farms?

Several studies have attempted to answer this question, and their results are summarized in Appendix A. All have found that the largest farmers attain lower production costs per dollar of output. This advantage is most pronounced in highly mechanized field and row crops. It is less apparent for more labor intensive crops such as fruits, nuts, and fresh vegetables. Even accepting these conclusions, two important facts stand out:

1. Even the largest farm has only a relatively small cost advantage over the more modestly sized family farm, generally ranging between 5% and 15% lower costs per unit of output.

2. At their slight cost disadvantage, family sized farms are still capable of making a profit. In short, they can be profitable even if they are not "optimal."

However, these studies have a serious flaw which throws their findings into serious doubt. They do not draw on systematically collected field data about the actual cost performance of farms of different sizes. Rather, they construct hypothetical models in which they impute costs to different acreages and production levels. There is reason to suspect that alert small farmers achieve actual costs well below those imputed to them in these studies.

The 1974 Census of Agriculture for California provides a view of these relative costs which is based on the reported actual performance of farms. The data are best interpreted when major commodity classes are considered separately. This report discusses three commodity classes which account for the production base of most of the state's farmers. They are: (1) fruits, nuts, and berries, (2) vegetables and melons, and (3) cash grains. Table 1 presents important general statistics on these three types of commodities.

Before proceeding to consider the census data, a note of explanation is needed. The tables and discussion will refer to classification of farm size utilized by the Census Bureau. These classifications of farm size are according to total annual sales of farm commodities, and are ordered as follows:

Ia - Farms with gross sales of $100,000 and over;
Ib - Farms with gross sales of $40,000 to $99,999;
II - Farms with gross sales of $20,000 to $39,999;
III - Farms with gross sales of $10,000 to $19,999;
IV - Farms with gross sales of $5,000 to $9,999.

It is convenient to think of class Ia as including the large, "industrial" farms. Class Ib, and in some cases class II, can be considered to consist primarily of relatively viable family-size farms. Classes III and IV are likely to have economic value primarily as part-time farms.

TABLE 1

IMPORTANCE OF VEGETABLES, FRUIT AND NUTS, AND CASH GRAINS IN CALIFORNIA AGRICULTURE, 1974

	Categories			
	Vegetables Mellons	Fruit/Nuts Berries	Cash Grains	Total Crop in Calif.
Total Sales (million $)	1,045	1,444	675	4,967
Percent	21.0	29.0	13.6	100.0
Total Acres (000)	740	1,769	1,833	8,307
Percent	8.9	21.3	22.1	100.0
Total Commercial Farms	3,145	24,816	7,347	36,000
Percent	8.7	68.9	20.4	100.0
Farms Selling $500,000 and more:				
Percent of all farms in category	26.8	3.0	15.7	5.5
Percent of all output in category	80.9	34.4	55.6	61.1
Farms Selling $99,999 or Less:				
Percent of all farms in category	39.8	84.7	50.4	77.5
Percent of all output in category	2.8	33.6	10.2	12.9
Farms harvesting less than 50 acres of crop:				
Percent of farms in category	45.1	70.0	14.7	50.8
Percent of all irrigated land in category	3.0	18.7	4.4	4.3
Farms harvesting 50 to 99.9 acres of category:				
Percent of all farms in category	11.7	16.0	14.9	14.2
Percent of irrigated land in category	3.5	15.6	6.1	4.5

Source: 1974 Census of Agriculture, Vol. 1, Part 5, California.

The Census data do not entirely corroborate for California the findings of the studies mentioned above. Whereas those studies found costs per unit of output to decline as farms grow larger, the Census indicates that is true in California only for cash grain farms. The opposite occurs for vegetable or fruit and nut farms, as is demonstrated in Table 2. For those commodities, the lowest total costs per dollar of output occur in Class II farms. Class Ib farms achieve lower costs than farms in Class Ia. Clearly, family size farms are more than competitive with larger farms as far as their cost performance is concerned.

Does this finding sound improbable? Tenneco Inc., which owns one of the state's largest farming operations, had the following to say in its Agricultural Report for November of 1975:

> Tenneco recognized early that the economies of scale, which are so apparent in most lines of business, sometimes do not apply in agriculture. From the standpoint of efficiency, there is no effective substitute for the small-to-medium-sized independent grower who lives on or near his farmlands, who is knowledgeable in the science of horticulture, and who has a deep personal involvement in the outcome of his efforts. ...Company farming (was) de-emphasized because, as previously noted, the successful independent grower is almost invariably more efficient in agricultural production.

Why do family farms tend to achieve lower costs? Table 3 suggests some of the reasons in a comparison of Class Ia and Class Ib farms. First of all, the smaller farms have lower labor costs. Not only do the larger farms use more hired labor, but they also have to make relatively expensive payments to corporate officers. On the smaller farm, unpaid operator and family labor is not a "cost" of the business, but rather an income stream to the family. The lower small farm labor costs account for much of the discrepancy in the cost performance of the two groups of farms.

It also appears that the family size farms achieve lower costs in the "other expenses" category. Per dollar of output they tend to pay less in rent, mortgage interest, and administrative overhead.

The above reasons would seem to imply that the smaller farms simply are more cost efficient overall, despite the fact that the larger farms expectedly show lower costs for machinery, fuel, and fertilizer. A conservative reading of the census data suggests that the class Ib farms tend to be cost competitive with class Ia farms in vegetables or fruits and nuts. However, it is difficult to state categorically that the smaller farms are more efficient. That is because costs need to be assessed in relation to the income they generate.

If the small family farmer in California can produce vegetables or fruits and nuts at a cost competitive with larger growers, then how does he compare in the income he receives from his crop? He does not fare very well. It appears from the census data that large farmers have an income advantage that can go as high as 30%. The reason is that they have higher gross sales per acre, as Table 2 indicates.

TABLE 2

FARM INCOME AND EXPENSES BY SIZE AND CLASS OF FARM

	Size Classes Total Sales of Farm Commodities				
	Ia $100,000 and over	Ib $40,000 to $99,999	II $20,000 to $39,999	III $10,000 to $19,999	IV $5,000 to $9,999
			Cash Grain Farms		
Average Total Sales per farm ($)	400,400	67,667	29,200	14,500	7,350
Average Harvested Cropland (ac.)	1,164	345	188	113	71
Average Net Income per farm ($)	153,075	25,363	10,181	4,097	555
Total Sales, per acre ($)	343	197	155	130	104
Net Income, per acre ($)	131	74	54	36	8
Total Cost, per acre ($)	212	123	101	94	96
Total Cost, per $ output ($)	.62	.63	.65	.78	.93
			Vegetable Farms		
Average Total Sales per farm ($)	859,709	67,143	29,695	13,660	7,385
Average Harvested Cropland (ac.)	752	66	38	17	10
Average Net Income per farm ($)	216,000	18,606	9,976	3,359	2,150
Total Sales, per acre ($)	1,141	1,011	782	806	758
Net Income, per acre ($)	287	282	262	198	215
Total Cost, per acre ($)	854	729	520	608	543
Total Cost, per $ output ($)	.75	.72	.66	.76	.70
			Fruit and Nut Farms		
Average Total Sales per farm ($)	332,723	63,170	28,271	14,337	7,276
Average Harvested Cropland (ac.)	323	80	42	25	17
Average Net Income per farm ($)	72,071	18,571	8,477	3,253	613
Total Sales, per acre ($)	1,030	789	680	568	440
Net Income, per acre ($)	223	232	202	130	36
Total Cost, per acre ($)	807	557	478	438	404
Total Cost, per $ output ($)	.79	.71	.70	.77	.92

Source: 1974 Census of Agriculture, Vol. 1, Part 5, California.

TABLE 3

THE COSTS OF FAMILY AND INDUSTRIAL FARMS (CLASS la, CLASS lb)

	Vegetable Farms			Fruit and Nut Farms			Cash Grain Farms	
	la	lb	lb*	la	lb	lb*	la	lb
Total Costs per $ output	.75	.72	.64	.79	.71	.54	.62	.63
Equip. & Machine Cost/$ output	.03	.08	.07	.04	.08	.06	.05	.11
Gas. & Other Fuel/$ output	.02	.03	.03	.02	.03	.02	.03	.05
Fertilizer/$ output	.06	.06	.05	.04	.05	.04	.09	.08
Hired Labor/$ output	.26	.25	.22	.31	.24	.18	.09	.06
Debt/$ output	.01	.01	b/	.04	.05	.04	.03	.03
Payments to Corp. Off./$ output[a]	.02	b/	b/	.01	b/	b/	b/	b/
Other Expenses/$ output[c]	.35	.29	.26	.33	.26	.20	.33	.30
Owner-Operator Labor/$ output[d]	.02	.19	.17	.06	.21	.16	.05	.19
Profit[e]	.23	.09	.19	.16	.09	.30	.33	.19
Market Value of Assets/acre(000)[f]	1.60	3.03		2.80	3.39		.91	.99
Market Value of Assets/$ output	1.69	3.36	2.98	2.92	4.63	3.52	3.20	7.21
Equity/$ output	.45	1.83	1.56	1.81	3.23	2.46	1.28	3.57
Debt/Equity (percent)	30.8	5.5		28.1	20.1		24.4	11.1
Percent Harvested Cropland Irrigated	94.0	91.0		93.0	91.0		69.0	39.0
Percent of Harvested Cropland Rented	72.0	48.0		22.0	18.0		55.0	48.0

* Costs adjusted on assumption that class lb farms receive Class la farms' per acre sales levels.

a/ Estimated by assigning total corporate payments to officers according to each crop according to its relative share of total corporate sales of all crops. Only Class la farms are assumed to make such payments.

b/ Less than .005.

c/ These expenses include taxes, rent, payments for water, machine hire, depreciation on trees and on buildings, insurance, repairs, electricity, seed, trees purchased, feed, livestock, office, etc.)

d/ Self-employed owner operators and partners assumed paid $20,000 per farm in Class la, $4,000 per farm, Class lb.

e/ Profit is residual, after subtracting costs and operator labor. This amount can vary according to assumptions made about payments to family and partners' labor.

f/ Based on estimates for cropland only--other land not included.

Source: U.S. Bureau of the Census, 1974 Census of Agriculture, Vol. 1, Pt. 5, California.

The reasons why large farmers have higher per acre sales are not clear from the data. More research is needed on this subject. However, some likely reasons include:

1. Larger farms are growing a bigger proportion of vegetable crops. Other census data indicate that virtually all vegetables are grown on class Ia farms, and vegetables have an exceptionally high per acre value. Because vegetables tend to be contracted and marketed in large volumes, most smaller farmers have not been able to participate in this highly profitable commodity line.

2. Large farmers may be producing higher crop yields. This could reflect their better access to high quality land and water resources. Conceivably, they are better farmers, making more effective use of technology. There is no evidence of this however, especially as compared to farms as large as those comprising class Ib.

3. Large farmers occupy a favored position in the market. They receive better prices and they sell to more reliable outlets. They also sell a higher proportion of their crops. At times they may be the only ones able to sell there products. The literature tends to support a conclusion that large farms have far greater market power, and that they may derive most of their competitive advantage from it. This implies that if small farmers could reduce their marketing disadvantages through cooperatives or other mechanisms, they might become much more competitive with larger farmer performance. Column Ib* in Table 3 indicates what the cost performance per dollar of output would be for class Ib farms if they received as much per acre as do class Ia farms. Their competitive position would be markedly enhanced. Clearly, family size farms that match large farm per acre yields and prices for their products can be very competitive indeed.

In sum, it is reasonable to conclude that, at least for vegetables or fruits and nuts, large farms have no significant cost advantage over family size farms. They may derive most of their competitive edge from their power in the marketplace. This means that their success is attributable primarily to factors that are institutional rather than technological. In turn, this implies that there are limits to what can be done for the small farmer through technological innovations alone, without concurrent measures to strengthen his marketing position.

THE ROLE OF AGRICULTURAL TECHNOLOGY

While more efficient use of modern agricultural technology does not account for most of the competitive edge enjoyed by large farmers, it does account for part of it. Machinery and fertilizers are at the heart of modern agriculture, and the census data indicate that large farmers achieve lower unit costs in the use of both. If small farmers could improve their relative efficiency in utilizing modern agricultural technologies, they also could improve their overall competitive position to some extent.

Mechanical Technology

Large farm agriculture has developed a strong foundation in technology, particularly in mechanical technology which saves labor. Today some types of industrial and family farms cultivate thousands of acres of land with little labor input. This is especially noticeable in cash grains, cotton, and certain vegetable crops. Developments in mechanical technology have tended to increase the pressure on family farmers to sell out or to grow larger.

The relationship between larger farm size and agricultural mechanization can be summarized as follows: Mechanical technologies are effective primarily because they spread the labor of the farmer or farm worker over more land, and hence over more output. For example, a bigger harvester allows the individual farmer or farmworker to produce more food using the same amount of labor, thereby increasing the amount of income generated by each unit of labor. If a farmer attempts to use the bigger harvester on too small an amount of land, the savings in labor will not be realized since the machine cannot produce more food unless it is applied to a larger land area.

In order to remain competitive, farmers normally need to adopt new technologies that reduce their costs. However, it appears that for some technologies new innovations confer their biggest savings primarily on the few farmers who adopt the devices early and who increase their landholdings accordingly. These savings mean higher profits, and eventually this in turn means larger amounts of the commodity on the market at lower prices. Thus, farmers who adopt the innovation late or not at all suffer as prices of their crops fall and the costs of their inputs continue to rise. (Late and nonadopters probably include many persons who would have liked to adopt the innovation early, but could not because of institutional or financial constraints. The result is a "cost-price squeeze" which forces smaller farmers to get bigger or to get out of farming. In the 20th Century this "cost-price squeeze" has been a fact of life both nationally and in California. It has been particularly pronounced in field and row crop production. It should be noted in passing that for farms already quite large, the dynamic does not involve increasing the farm size, but rather it results in the displacement of hired labor.

The historic importance of mechanical technologies in agriculture has been the result of a particular relationship between the prices of land, labor, machinery, and food. In brief, land and machinery have been inexpensive in relationship to labor. Thus, substituting these inputs for labor has reduced the costs of production. Although the costs of land and machinery have risen, the costs of labor over the long term have risen even more rapidly. This has made laborsaving technologies very attractive.

Some very recent trends, however, raise the issue of whether the historical price relationships between land, machinery and labor will continue into the future. Since 1972 real wages have declined rather than risen. At the same time, the real costs of machinery and fertilizer have increased, partially as a result of escalating energy costs. Should these new trends persist for long, the economic logic underlying the expansion of mechanical technology may be replaced by a logic emphasizing more intensive use of land and labor. Should this occur, the continued displacement of small farmers and farmworkers would be likely to slow. If energy prices continue to climb, energy-intensive technologies will become relatively expensive and hence less attractive.

The decline in real wages has been accompanied by a general growth of unemployment. If this continues, fewer farmers will leave the land for better opportunities elsewhere. Employers of labor will have less incentive to displace workers whose wages are not climbing as fast as the prices of other inputs. At this point nobody knows whether recent trends will remain or whether the older trends will reassert themselves. Given the persistence of unemployment and energy problems, however, it would appear that some of these recent factors will continue for at least the next few years.

Another trend change is worth noting. Since 1971 there has been a marked increase in the net return per acre, as is indicated in Table 4. This is due primarily to more favorable prices for farm commodities, and it is in contrast to the 1950-1969 period when the return per acre actually declined at a rate of about 1.5 percent per year. At the same time, average farm size and the worth of average farm assets have remained fairly constant. It appears that historic trends have been reversed as higher agricultural incomes have allowed more farmers to stay on the land, perhaps even allowing family farmers to reinforce their foothold. However, the prospect remains that if farm prices do not remain at high levels, small farmers will again be forced out of farming as previous trends again take hold.

Such new trends portend changes in mechanical technology for farmers. Very large, laborsaving machines could become somewhat less attractive economically while machines making labor more versatile might become more desirable. Small farmers already have been indicating that they wish more equipment of this type. Farmers on the task force stressed the need for farm machinery which not only is small enough for family size farms, but which also is less specialized. Currently, equipment costs for small farmers are particularly high because, in part, they must obtain multiple items of single purpose equipment, each of which represents a high fixed cost that can be used only a small portion of the year. On a survey of over seventy small farmers, 45% expressed difficulty in finding appropriately sized equipment (see the Marketing Task Force report, to which the findings of this survey are appendixed). The Technology Task Force has determined that power equipment (e.g., tractors) is in fact available on the market at sizes appropriate to small operations. It is likely, therefore, that respondents to the survey are thinking of other types of machinery, such as traction equipment. It also may be that they are not in all cases fully aware of what is available on the market.

Economies of size studies, such as those summarized in Appendix A, all assume that the farmer must own his equipment. However, if machinery sharing, custom work, or renting are taken into consideration, the machinery costs quoted in these studies could be substantially altered. It is apparent that some farmers do in fact use these arrangements, but the percentage of farmers using them is low. In the small farmer survey

TABLE 4

AVERAGE CALIFORNIA FARM INCOMES AND VALUE
(1971-1976)+

Year	Acres/ Farm	Average Value/ Operating Unit		Realized Gross Income/ Farm	Expenses/ Farm	Realized Net Income/ Farm	Net Income/ Acre	
		Real*	Nominal				Real*	Nominal
1971	546	222,093	269,400	83,706	66,354	17,351	26.3	32
1972	549	228,252	286,000	92,958	69,811	23,147	33.5	42
1973	543	220,135	293,600	120,271	83,877	36,395	50.3	67
1974	537	225,389	332,900	141,815	100,296	41,519	52.1	77
1975	531	237,158	382,300	141,344	103,580	41,850	44	71
1976	523	220,768	384,800	148,432	106,432	41,850	46	80
1977 (estimated)			378,900					

+ All dollar figures are nominal except where indicated.

* 1967 dollars.

Sources: Farm Real Estate Market Developments, U.S. Economic Research Service; U.S. Dept. of Agriculture, July 1977.
California Farm Income, U.S. Dept. of Agriculture and California Dept. of Food and Agriculture, California Crop and Livestock Reporting Service, August 17, 1977.
Statistical Abstracts, 1977.

mentioned above, it was found that very few farmers rent or share equipment, and none contract for machinery services, except for harvesting. On no single type of equipment does the percent of farmers renting and/or sharing exceed 20%. Virtually none rent out their own equipment, and only 15% do custom work for other farmers.

It would seem that many of the advantages of mechanical technology could be made available to the family farmer if better arrangements were available for the sharing or renting of equipment. The task force examined the problems of machine and equipment sharing and found that there are sound reasons why farmers like to own their own equipment. Two stand out.

1. Good farming technique demands good timing, and delay in access to a particular piece of equipment at the correct time can mean significant losses in yield. Farmers surrender some cost savings in order to know they will have a piece of equipment when they need it.

2. Sharing arrangements demand that participating farmers live close to one another, raise similar crops and have similar equipment needs, and be able to work together easily. The time and effort involved in working out arrangements can reduce the efficacy of sharing.

Other Technologies

Whereas much mechanical technology is designed to save on labor costs, other kinds of technology exist which make the farm more productive by increasing crop yields. Unlike mechanical technologies, which tend to require the farmer to purchase expensive equipment and increase the size of his farm, these yield-increasing technologies generally can be purchased by all farmers for use on even the smallest farms. Fertilizer, for example, can be purchased and applied in small amounts appropriate for a garden plot.

However, the task force has found some evidence that even in this seemingly size-neutral technology there are factors working against the small farm. The following discussion identifies certain specific biases of this type, addressing them from the standpoint of the "limited resource" farmer producing high-value crops such as vegetables, fruits, and nuts.

Pesticides and fertilizers. These important inputs are available to all farmers, but can be bought more cheaply in large volumes than in small quantities. Among midwestern farmers, quantity discounts are widely available to small producers through cooperatives. However, in the small farm survey cited above, it was found that only 12% of the respondents purchased fertilizers cooperatively; the rest bought from retail outlets. Quantity discounts are available for many inputs and services, and for very large farms they add up to substantial cost savings. Custom pest control services prefer to serve large producers, whom they charge lower prices. In terms of the total production costs these savings are minor, but they do add to the larger farm's competitive edge.

There is a definite disadvantage that the small farmer faces in regards to services performed by pest control advisors. Like other industries, the chemical industry is sales oriented, and thus provides its services where it is most likely to make major sales. Its fieldmen check fields on a regular basis for large growers, thus arresting problems before they have a chance to get out of hand. However, in some areas most small producers see less of these people. As a result, by the time a problem is noticed or diagnosed, it sometimes is too late to take effective action.

Another problem area is the registration of pesticides, a process requiring expensive and time consuming tests. Normally these studies are done by companies wishing to register their products for sale on a given crop. However, to justify the expense, expected sales must be substantial. This means that few chemicals are registered for crops that are not grown extensively in California. The farmers growing these low acreage crops tend to be small farmers, and their yields suffer simply because they cannot use appropriate pesticides not yet registered for the crop they raise. The University already does much pesticide research, but like the private sector, it focuses primarily on large acreage crops.

Integrated Pest Management. Recent developments in the biological control of insects could be particularly useful to the small farmer, for they substitute a relatively cheap form of pest control for an increasingly expensive (and some say increasingly ineffective) method. However, integrated pest management services are provided by private consultants, who are a fixed cost more expensive to the small farmer than the large one. The consultant takes as much time to travel to a small farm as a large one, and therefore must charge a higher per acre fee for the smaller farm.

Plant Varieties. Many of the recent developments in the breeding of new varieties of fruits and vegetables have been oriented toward the creation of commodities which can be machine harvested and which are capable of withstanding the rigors of a modern distribution system demanding long shelf life and durability. However, certain consumer interests have been vocal in their criticism of the produce quality that has emerged, and there is some indication that a portion of consumers would be willing to pay premium prices for produce that is more mature and flavorful. If this new demand emerges as significant, plant varieties bred to meet it will be especially important to the small farmer, for there is reason to believe that he can compete especially well in providing this top quality product.

Irrigation. Water is the greatest contributor to land productivity, and small farmers face increasingly expensive water as the water table recedes and the expense of sinking a well rises. On limited land area, this fixed cost could become too expensive to warrant the investment. New low pressure drip irrigation systems will revolutionize our water control practices. They will permit more intensive production and will reduce certain costs, such as those for herbicides. Although they have a high capital investment, they are appropriate for large and small farmer alike. However, they take very skilled management. If larger farmers are in a better position to finance these new systems and to learn how to use them, the small farmer will suffer. On the other hand, if financing and training are available to small farmers to make use of this water-saving technology, they can benefit equally with the larger growers. As water costs rise, these drip systems are likely to confer substantial advantages on those who make use of them.

Post-Harvest Cooling Facilities. Removal of field heat from fruit and vegetables increases the quality of the fruit, and hence its saleability and price in the market place. While most large commercial growers have their own cooling facilities, many smaller growers have no such access. In the above small farmer survey, 73% of the respondents reported that they had no post harvest facilities, and they had little capacity to store crops. Some rent cooling space from private companies, and about 20% report having access to cooperative cooling facilities. Without adequate post-harvest handling, the farmer is considerably disadvantaged, both in the quality (and price) of his product, and in his ability to wait out a temporary downturn in the market.

Organizational Technologies. In modern farming, the management of farm resources is crucial to success or failure. As farming becomes more specialized and sophisticated, the need for specialized information becomes more important. With specialization also comes complexity which demands more rigorous management. Where management assistance and information comes from and who has access to it is increasingly a determinant of farming success. There is some evidence that small farmers are disadvantaged in obtaining management information and assistance. For example, banks help some farmers with their production decisions, but are reluctant to provide this service to the small farmer because of the high administrative costs and the low returns from his account. Computerized management information services are expensive for small farmers relative to large ones, although in many cases they could be important in helping them control their costs.

Task force members also have suggested that while the procedures of farm management have been highly refined for conventionally organized enterprises, they have not been well developed for the cooperative farm, which faces very different problems of doing business. Farmers who attempt to overcome some of the disadvantages inherent in being small by forming cooperative production organizations find little support from institutions charged with providing farm management information. For example, low income farmers have found it most profitable to concentrate on high-value crops requiring much labor and relatively little land and equipment. However, the technology of intensive agriculture has not been studied by the university, and very little is known about it. While we know that many farmers have for years produced large incomes on small acreages, the methods of this kind of farming have not been readily studied or described by farm advisors. In this case, the organizational technology which could help the small farm has not been well developed.

Reference already has been made several times to the need for small farmers to work cooperatively in different activities in order to reduce their disadvantages. There are many legal and procedural options which should be explored as avenues for this kind of cooperation. Cooperatives are only one way that small farmers might work together. Very little has been done to develop the organizational technology that a modern small farm sector will need to deal with a wide variety of production, economic, and even political problems.

III. THE POSSIBILITIES FOR FAMILY FARMS

The assertion often is made that small farms are so uncompetitive that they cannot provide enough income to support a family decently, and therefore attempts should not be made to maintain them. Let us take a look at the potential and possibilities for family size farms.

Table 5 displays data on high-value vegetable, fruit, and nut crops which are the most amenable to small farmer production. They comprise about half of the total crop sales in the state. These data describe the returns that can be expected from each crop, based on average yields and 1975 prices. It is important to note that commodity prices in 1975 were generally strong. The net income figure (column 3) assumes that the farmer and his family could supply all the labor. Any hired labor therefore will reduce the net income figure. Were all harvest labor to be hired labor, the net income available to the farmer could be reduced by as much as two thirds the amount shown in column 3. The final column, displaying the acreage needed to provide a net income of $15,000, also assumes that all the income is captured by the farmer. This may actually be possible in some cases, such as the cooperative strawberry farms on which families do the labor and have earned more than $20,000 on less than five acres. Such families tend to be large, and therefore are able to put more workers in the field. Even if this is not likely for most of the crops on this table, it is likely that families could earn $15,000 with less than 50 acres of most vegetable crops and with less than 60 acres in most fruit and nut crops.

Table 5 is based on cost and yield data developed by the University of California Cooperative Extension Service. Table 6 provides an alternative view, based on the 1974 agricultural census. Its estimates are more conservative, being based on the performance of a wide variety of farmers. It makes the following assumptions:

1. All land is rented or leased at the following rates: $75 per acre for grains, $125 per acre for vegetables, and $200 per acre for fruits and nuts.

2. The farmer owns equipment of the same type typical for farmers of comparable size as recorded in the census, and the farmer pays 8.5% interest on the entire value of that equipment. He has no equity in land, buildings, or equipment.

3. All labor not supplied by the farmer or his family is hired at a wage of $2.50 per hour.

TABLE 5

HIGH VALUE CROPS

Crops	Gross Value per acre*/	Cash Costs per acre a/	Net Income per acre b/	Acres needed for $15,000 c/
	$	$	$	acres
Vegetables				
Artichokes	1,150	287	863	17.4
Asparagus	800	240	560	26.8
Beans, Lima	500	220	270	55.8
Broccoli	1,200	450	750	20.0
Brussels Sprouts	1,800	400	1,400	10.7
Carrots	2,200	327	1,873	8.0
Cauliflower	1,300	590	710	21.1
Celery	3,300	1,250	2,050	7.3
Cucumbers	1,920	250	1,770	8.5
Garlic	1,800	300	1,500	10.0
Melons	1,400	400	1,000	15.0
Lettuce	2,500	400	2,100	7.1
Onions	1,250	300	950	15.9
Peas	675	199	476	31.5
Peppers, Green	1,800	750	1,050	14.3
Spinach	500	275	225	66.7
Tomatoes/proc.	1,200	500	700	21.4
Berries				
Bushberries	2,500	500	2,000	7.5
Strawberries	4,000	1,000	3,000	5.0
Fruits and Nuts				
Apricots	880	320	560	26.8
Almonds	750	340	410	36.6
Apples	1,000	350	650	23.1
Oranges	1,400	400	1,000	15.0
Peaches	1,450	400	1,050	14.3
Grapes	750	200	550	27.3
Walnuts	480	270	210	71.0

*/ 1975 prices and average yields for California.

a/ Cash costs include all nonlabor costs incurred. These costs also include taxes, rent of $100 per acre, and depreciation on capital equipment.

b/ Net income per acre is the residual obtained by subtracting column 2 from column 1. Insofar as the operator hires labor the size of net income will decline. He obtains the total amount listed in this column only if all the labor is supplied by him and his family.

c/ The assumption is made that all labor is supplied by operator and family. To the extent that other labor is hired, especially in harvesting the crop, the acres needed to earn $15,000 will be higher.

These data are based upon University of California Cooperative Extension cost sheets.

4. The farmer's total sales per acre and costs per acre are the same as those of comparably sized farms, which are values reported in the 1974 census. However, it is assumed hired labor is used only where family labor is insufficient to meet requirements.

The final entry in each farm category shows the impact of a price or yield decline of 10% on the size of farm needed to fulfill the $15,000 income goal.

This table shows somewhat higher minimum sizes needed to obtain $15,000 of income than does Table 5. The cash grain farm, it should be noticed, needs many more acres than either of the other two crop categories. This reflects its much lower degree of labor intensity. Since 1974 was a good year for cash grain prices, normal conditions could dictate a farm larger than shown. The table also demonstrates that the more family members working, the less hired work has to be purchased, especially in those crops for which there is considerable need for labor.

The minimum sized farm is highly influenced by changes in either the yield or the prices received for commodities. Since 1974 was a particularly good year for most commodities, it is likely that the displayed minimum acreages are somewhat smaller than would be necessary to maintain this income level. Were crop prices to rise, the minimum acreage would of course be even less. Further sensitivity analysis has indicated that a drop in yields or prices of approximately 30% would erase the entire income available to the family. This demonstrates the effect of volatile prices on small farmers who have not diversified their production in such a way as to hedge against low prices for any one commodity at a given time.

The point is clear. The small farmer who can find a way to insure a stable demand for his product, or who can engage in cooperative marketing (and perhaps planning of crops) can compete with larger units. However, the small vegetable or fruit farmer probably will not survive in the current system if he insists on "going it alone." The viability of the family farmer who wants to grow vegetables or fruits and nuts cannot be assured simply by improving the mechanical equipment available to him.

The preceding discussion indicates that family farms can indeed produce enough income to support a family, but it also suggests some of the serious problems which have to be overcome if this kind of agriculture is to become widespread. It should be pointed out that 93% of grain production, 98% of vegetable production, and 74% of fruit and nut production is presently produced on farms larger than the minimum sized farms (with 1.5 worker years) shown on Table 6. On the other hand, 49% of the cash grain farms, 34% of the vegetable farms, and 79% of the fruit and nut farms are smaller than these minimum sized farms.

Let us imagine for a moment that all production in each of the three crop categories came from family farms, each of which produced about $100,000 in total sales. At this size, these farms would be about 60% larger than the minimum units estimated above (from the census data) as necessary to produce an income of $15,000. Following is the change in the number of family farms which would result:

TABLE 6

MINIMUM SIZED FARMS NEEDED TO PROVIDE A FAMILY WITH $15,000 IN INCOME

	Full-Time Farms Providing $15,000			Part-Time Farms Providing $7,500
	Total Worker-Years Provided by Family			
	1 year	1.5 years	2 years	0.5 years
	Cash Grain Farms (irrigated)			
Total Sales @ $343 per acre ($)	55,909	49,392	41,150	28,469
Total Acres Harvested	163	144	120	83
Value of Equipment ($)	22,820	20,160	16,800	11,620
Value of Land and Bldgs. @ $1,300/ac.	211,900	187,200	156,000	107,900
Acres needed if prices fall 10%	230	197	183	140
	Vegetable and Melon Farms			
Total Sales @ $1,017 per acre ($)	76,275	60,003	52,854	53,901
Total Acres Harvested	75	59	52	53
Value of Equipment ($)	35,768	28,138	24,800	25,276
Value of Land and Bldgs. @ $1,500/ac.	112,500	88,500	78,000	79,500
Acres needed if prices fall 10%	140	91	77	150
	Fruit and Nut Farms			
Total Sales @ $789 per acre ($)	113,616	78,900	67,850	103,359
Total Acres Harvested	144	100	86	131
Value of Equipment ($)	51,428	35,700	32,250	49,125
Value of Land and Bldgs. @ $2,500/ac.	360,000	250,000	215,000	327,500
Acres needed if prices fall 10%	332	163	129	500

Source: Census of Agriculture, California, 1974.

	Present	Possible
	Farms Large Enough to Support a Family	Family Farms ($100,000 sales)
Vegetables	1,200	10,000
Fruit/Nuts	4,500	14,400
Other Crops	3,700	18,000
Total	9,400	42,400

Iowa is a state of particularly prosperous family farms. Yet there 90% of the farms have total sales of less than $100,000. In other words, family farms as assumed above are large farms by national standards. They are quite capable of using modern technology and producing at low costs.

POLICY ALTERNATIVES

We have seen that large farms enjoy some advantages accruing from mechanization and other technological innovations. Public policy has had a major role in fostering these innovations and their adoption. If the family farm is to become a stable and prosperous institution in this state, it must receive from public policy at least as much support as has been enjoyed by the far larger industrial farms. Future public policy should be designed to eliminate the advantages of the industrial farm which accrue from the effects of past and present public policies. Rather than support those operations which are best able to purchase services on the open market, public policy should direct taxpayer-supported services to farms less able to obtain them from the private sector.

The main public institution developing agricultural technology is the university, which is part of the national land grant college research system and which operates the extension service. Sometimes it is implied that the university is the prime source of agricultural technology in the state, but this is not true. Most agricultural technology is developed primarily in the private sector. However, the university is the most important single institution advancing agricultural technology, and in certain fields (e.g., plant breeding) it dominates the activity. Because it is the major instrument of public policy in the development of agricultural technology, the university should be the first object of attention in building public policies that will serve family farmer technological needs.

Approaches to the Problems of Mechanization

Some suggest that the university terminate research that results in any dislocation of workers or farmers. This is unrealistic, for all innovation generally has at least some dislocation effects, even if its total impact is positive. However, the university could be more sensitive to the issue and its implications for rural society as a whole.

A more likely alternative is to use publicly funded research and development programs to produce technologies that are appropriate to the needs of small rather than large farmers, helping them to increase the return of sophisticated mechanization on limited acreages. One kind of technology appropriate to small farmers would lighten the burden of work and make the individual farmer more productive without forcing major displacements of labor or requiring large capital expenditures. Another kind would facilitate higher production per each acre of land, boosting yields as an alternative to expanding acreage. A third type of mechanical technology would reduce costs through lowering capital investment necessary to take advantage of new methods.

In the main, the advantages of large scale mechanical technology are real and cannot be dismissed easily, nor can they be eliminated by the development of a competitive technology. This means that ways must be found to make this technology work for the small farmer. One obvious course is to help develop better mechanisms for facilitating machinery sharing, particularly for highly specialized equipment. Much more work on the possible organization and operation of machinery cooperatives could be undertaken by the university, a kind of organizational technology that possibly could have major impact in favor of small producers. Another course of action is to develop machinery that is more versatile, allowing the farmer to adapt machinery systems to a wide variety of farm uses.

Approaches to Other Technological Problems:

Mechanical technologies are only the start for a program of research adapting modern technologies to small farmer use. Following are some specific examples of possible innovations that the task force has heard suggested as needed:

1. Disease resistant crop varieties producing top quality produce for intrastate use.
2. Portable post-harvest cooling facilities which can serve a wide variety of farmers and crops.
3. Cropping patterns allowing for intensive agriculture and crop diversification on small acreages, including intercropping and close sequencing techniques already highly developed in other countries.
4. Management information systems that can be used at a reasonable rate by small farmers.
5. Integrated pest management delivery systems economic for family farmers.

One of the major problems which underlies the various disadvantages faced by the family farmer is the lack of support he has in developing organizational structures. Much more activity should be devoted by the university and appropriate federal agencies to developing the means by which farmers can coordinate their marketing and production activities. By the same token, farmers are themselves going to have to realize that their survival depends in part on their ability to work together in certain crucial activities. Tomorrow's agriculture is far more complex and integrated than that of yesterday, and farmers are going to have to be able to deal in that kind of environment. Given an appropriate organizational framework, small farmers can be expected to be able to share in the income which now is concentrated on a few farms.

IV. SPECIFIC POLICY RECOMMENDATIONS

The previous discussion suggests some policy directions and alternatives, but in formulating our recommendations, the first and foremost concern with the task force has been that a mechanism be established whereby the needs of the family farmer receive first priority in the agencies and public institutions established to serve agriculture. We see no need for the continuing support of a highly prosperous sector of the farm system which is sufficiently wealthy to provide for its own needs. Moreover, we think that continued support of this most prosperous sector will be detrimental to the prospects of the family farmer. We think that public officials should have a clear understanding of the problems faced by various groups within the family farm sector. Our primary concern in the following recommendations is to set up a process whereby a continuing relationship between the smaller family farmers and the public sector can take root and flourish. In this way we think that the real needs of this group, many of which we have not addressed, can become the focus of attention. Therefore, most of our recommendations intend to bring three major institutions--the University, Cooperative Extension, and the Department of Food and Agriculture--closer to the problems of the family farmer. In addition, we will reiterate our policy concern for the development of a family farm price support system, not just for the major commodities, but also for the specialty crops.

A. University Research on Farm Technologies

1. The university should establish a new set of goals which emphasize a commitment to the welfare of smaller, family farmers, farmworkers, and rural communities. The traditional goals which place a high priority on increasing the productivity of the land and labor should be continued, but with greater emphasis placed on the possible impact of new technologies on the structure of agriculture the prosperity of the rural community, the long-term survival of the environment, the long-term shifts in the relative costs of energy and other agricultural inputs, the health and safety of farmers and farmworkers, and the quality and safety of food. All of these latter considerations lie within the scope of the Experiment Station research activities and should be reflected in its basic goals. The inclusion in this list of new research concerns not directly related to small farm technologies underlines the Task Force's opinion that small farmer problems are

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inextricably related to the overall development of the rural sector. They cannot be treated independently of the concern for the farmworker, the consumer, the rural poor, or of environment quality.

To make these new goals effective, the task force further recommends that:

2. The hiring, firing, and promotions of researchers should be based upon explicit recognition of the researcher's performance on work related to these new goals, as well as to traditional goals of departments. Unless rewards, rather than penalties, are offered for individuals working with the less politically powerful segments of agriculture, very little change will occur in the university's research and development program. The control over research is not generally strong except at three points--hiring, firing, and promoting. If the university research program is to be made accountable to public concerns, its personnel actions need to reflect those concerns.

3. Annual public disclosure should be made of all current research activities of the Experiment Station. This should include project descriptions, research money allocations to each project, and progress reports. The Director of the Experiment Station should prepare an annual progress report detailing significant research dealing with the new goals, and should identify problems deserving greater attention. This document should be made available to the public and to the research departments.

4. Discretionary funds should be allocated specifically for the purpose of encouraging researchers to undertake new, and perhaps risky, types of research dealing with small farm technology and related issues. Priorities for the use of this funding should be established by administrators of the Experiment Station in conjunction with input from rural people, including representatives of small farmers, rural businesses, rural public officials, farmworkers, and environmentalists.

5. The present use of private funds from interested agricultural industries for particular kinds of research should be subjected to a strict review process. The possible impact of such funds on the overall use of university research resources should be assessed by this process in light of the new goals and the possible alternative uses of these resources. Research should not be isolated from the needs of the agricultural community; the researcher's time and resources should be available to all segments of the rural community, whether they have funds or not. Moreover, we believe that the impact of private funds may be more extensive than might be indicated by their relative size, for they generally lead to the commitment of public funds for the same purposes. In other words, they are used to leverage taxpayer supported research and development resources. This is the practice we wish to discourage,

especially when it causes research resources to become too heavily weighted toward the interests of the large and prosperous farmers.

6. University teaching responsibilities should include practical instruction in farm management and production techniques applicable to the family farm. In addition, its training of graduate researchers should include exposure to the issues relating to the effects of technology on social welfare, and it should encourage research in these fields in the appropriate departments.

B. The Cooperative Extension Service:

Extension is the point of contact between the farmer and the research institutions. It plays an important role in the dissemination of new ideas and technologies to the farmer, and in the translation of the farmer's technical problems to the researchers. It is therefore important that the small farmer have access to the resources of this institution. We recommend:

1. The allocation of extension research and support activities should be subject to new goals and priorities similar to those described in recommendation A. 1. A new set of working priorities should be established through a process incorporating input from neglected public interest groups including small farmers, rural public officials, farmworkers, and state officials.

2. The concept of farm advisors to help serve small farmers, piloted under Title V of the Rural Development Act, should be further developed. It should be incorporated into the normal extension program and expanded to include other regions of the state. In addition, these agents should have access to research resources such as test plots--where the vast majority of farm-specific research is now carried out--and the university research departments. These agents need administrative support to be able to place demands on scarce resources, which could require a new administrative department within Extension so that the agents in the field have some alternative means of influencing research resource funding and availability.

3. The Extension Service should develop a more holistic perspective of the farm as a complete system. Several Task Force members pointed out that Extension is currently organized to provide only specialized information useful to the highly specialized farm. It is not equipped to provide general farm management information or assistance, particularly in those regions of the state now dominated by large-scale agriculture. (Even in these large-farm districts there are substantial numbers of small farms.) This is particularly relevant to our concerns for the application of intensive farming technologies, which probably call for rigorous integration of methods of water control, pest management, soil fertility, and crop rotation. At the present time, each of these activities is advised by separate specialists.

4. Cooperative Extension should offer advice on organizational technologies which allow the individual farmer to plan and cooperate with other family farmers in the production and marketing of his crops. In many ways, this kind of technology may be more important than the more traditional technologies to the survival of family farms, especially as the rest of the economy becomes more complex.

5. The Extension Service should actively help devise delivery systems of agricultural services which do not discriminate against the small farmer. For example, machinery contracting and sharing, irrigation, post-harvest cooling, pesticide testing, harvest contracting, and integrated pest management are all services of potential value to both large and small farmer, but they may not be available on equal terms to the small farmer. Delivery systems which meet the needs of smaller farmers are important determinants of their viability.

6. Important information documents should be printed in Spanish as well as English, and there should be more Spanish speaking agents. Many current and potential small farmers are primarily Spanish speaking.

C. The Department of Food and Agriculture:

The State Department of Food and Agriculture is primarily a regulatory agency and a collector and disseminator of information. Of the regulatory activities which affect the small farmer and his technology, perhaps the most important are those relating to marketing, labor, and the environment.

1. The Department of Food and Agriculture should establish a unit to assess the impact of various regulations on the viability of smaller farmers. These activities should extend beyond those relating to technology to include marketing orders and other regulatory activities. Such a unit should investigate existing and proposed regulations to see how they affect the relative competitive position of small farmers; it would be charged with providing suggestions for how regulations could be modified to fairly treat this sector of agriculture. This unit also could provide small farmers with information on how to cope with the growing regulation of agricultural labor, which may become a major source of difficulty for the small farmer who does not now keep records or who cannot afford to undertake all the administrative costs associated with hiring only a few workers.

2. The Department of Food and Agriculture should collect information on the planting and harvesting of all specialty crops commonly grown by small farmers.

D. Agricultural Price-Setting Agencies of State and Federal Government.

Agencies influencing or regulating commodity prices should establish pricing policies that will include an objective of protecting family farmers. The single most important factor to a farmer's economic viability is the level and stability of the price he receives for his crop. One of the major reasons so few family farmers participate in the production of vegetables is its high degree of uncertainty due to widely fluctuating prices. Likewise, a most effective way to establish incentives in agriculture is through prices. If the family farmer could obtain at least as much for his crop as do his larger competitors, inherent disadvantages he might experience because of institutional factors could be overcome.

APPENDIX A

ECONOMIES OF SIZE IN CALIFORNIA AGRICULTURE

The layman is told that the superiority of large farms is well documented by studies which find substantial economies of size in farm production. In this appendix we examine these studies and show that they do not provide very clear indications of whether large farms are more efficient. Moreover, while there is prima facie evidence which suggests that large farms are more successful in surviving, we do not know whether this success derives from technological sources or from the ability to gain access to the marketplace, land, credit, supplies, information, and so forth. If it is the latter conditions, then institutional reforms could alter the advantages of large farms markedly.

The most commonly cited economies of size studies find the following farm sizes "optimal" for each of the crop categories:

Yolo Cash Crops	900 acres	(1960)
Imperial Cash Crops	1,200 acres	(1962)
Imperial Vegetables	640 acres	(1962)
Kern Cash Crops	1,000 acres	(1963)
Fresno Cotton	600-1,400 acres	(1965)
Sutter Peaches	80 acres	(1963)

Assuming that technology is more costly and sophisticated in 1977 than it was in the early 1960s, one might conclude that if anything, optimal farm size should be considerably greater today than indicated by these estimates. But before accepting these estimates and the kind of agricultural system they imply, let us look at the procedures and assumptions employed by the researchers to obtain these conclusions. We will see that there is considerable uncertainty over what these studies actually show.

How are Economies of Size Studies Done?

It is important to understand that these "cost-size" studies are not based on statistical or econometric analyses of the actual performance of farms of various sizes. Rather, they are based on hypothetical or "synthetic" models which are intended to be representative of various sized farms. In other words, the researcher puts together four or five model farms which supposedly embody the most important characteristics of small, intermediate, and large-sized farms. At the core of each of these model farms is a particular package of machines and equipment. Table 1A provides an example of the packages used to estimate the economies of size of Imperial vegetable farms. Notice that farms of less than 160 acres are assumed to own no equipment at all. These particular combinations are put together in consultation with local farm advisors and agricultural engineers. To what extent these combinations are representative of actual practice on various farms is not clear, though there need be no precise relationshp between the package used in the study and the actual production practices of farms.

The next step is to estimate the costs of owning and operating this equipment. Thus, the costs of depreciation, insurance, and interest associated with each particular package are estimated along with the labor costs of running the equipment. All labor is assumed hired. In addition to these costs, supervisory costs and bookkeeping costs are also estimated for each farm (smallest farms are assumed to do their own supervising and bookkeeping). Then using these total costs, the per acre costs for each farm package are estimated, for every possible farm size within the range of the equipment's technical capacity. Figure 1A shows an example for this for this for Imperial field crop farms. The solid lines labeled II, III, IV, V are estimates of the per acre costs for each package, for various-sized farms. The solid line labeled I represents the costs of contracting for machine services. The dotted line shows the "envelope" of least cost production for each farm size, assuming that the most appropriate combination of machines, equipment. labor, etc., is used as efficiently as possible.

It can be argued that given the procedures involved in these kinds of studies, the finding that larger farms are less costly to operate is inevitable. First, since machinery costs are mostly fixed, spreading them over more acres must lead to lower unit costs--it is a simple matter of dividing a fixed number by an ever larger denominator. Second, the fact that each successive package of machines offers lower costs than the preceding package is likewise not very startling. If one divides any number by a big enough denominator, eventually the result will be a small number. The particular packages of machinery were selected on the basis of actual performance data. As a result, the observation of declining costs was essentially built into the very methodology of the study.

All this does not mean that there are no economies of size, only that these studies are not very useful in helping show their nature. It ought to be further pointed out that in constructing these cost curves, researchers assumed that all farms produced "normal" yields and earned "normal" prices typical of the region. In other words, if large farms have preferential treatment in the market, it is not reflected in these studies, or if small farms have higher yields, it too is not reflected.

What Do These Studies Imply About Economies of Size?

These studies show that if a small farm uses the particular "small farm" package of technology and labor efficiently, it will have higher costs than a large farm which uses the "large farm" technologies efficiently. But what does this say about the actual performance of large and small farms? Do small farms have other alternatives not reflected in these packages of inputs? Is there a difference between the effectiveness of family versus higher management? Do small farms have higher yields, do large farms obtain better prices? These kinds of questions must all be answered if we are to make any comparisons between the optimality of large versus small farms. None of them can be answered by this approach to the problem.

TABLE 1A

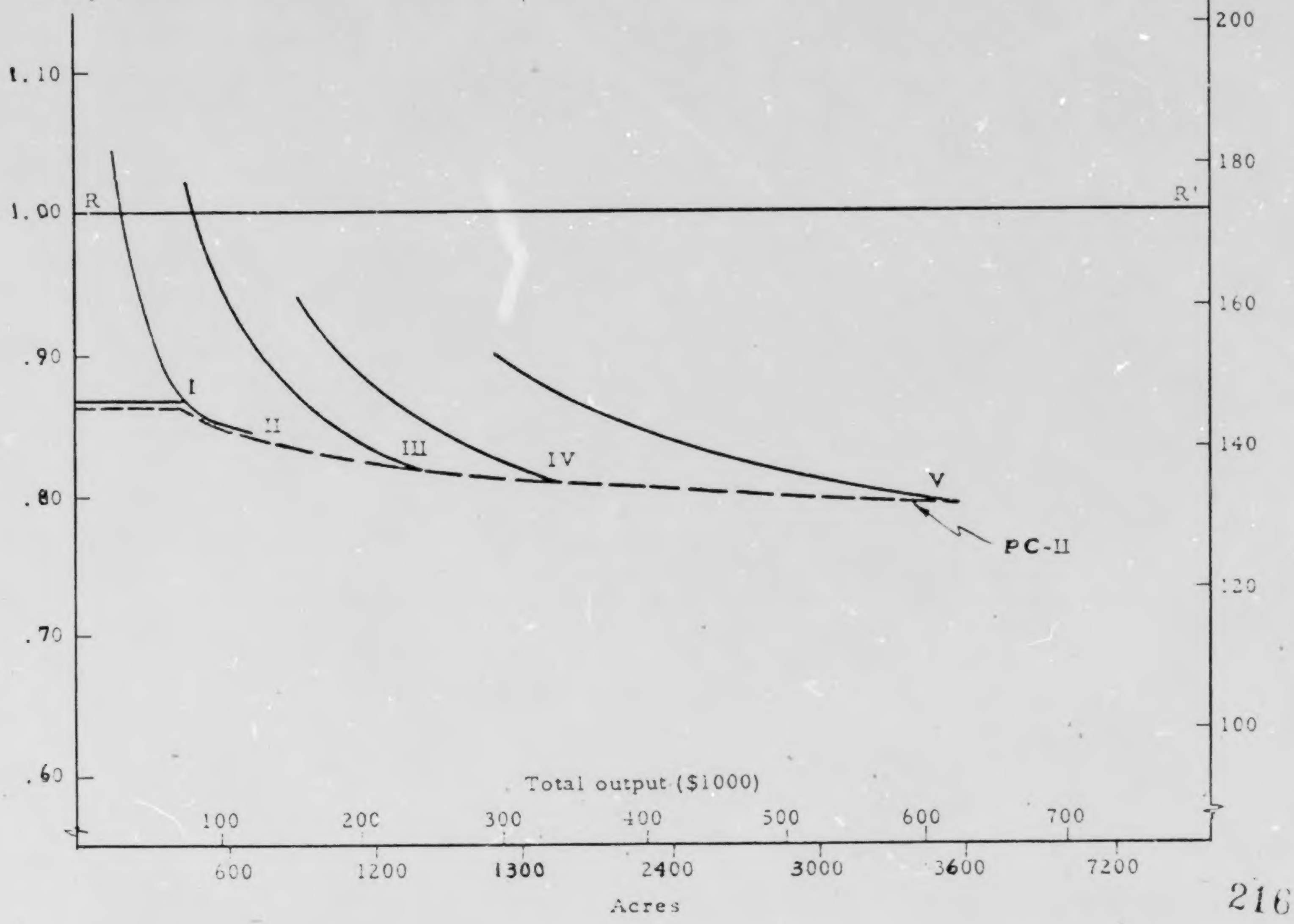
Typical Machinery Combinations for Vegetable Crop Farms of Various Sizes, Imperial County, 1959[a]

Type of Machine	Machinery combination for farm sizes[b]			
	II (160-640 acres)	III (640-1,200 acres)	IV (1,200-2,400 acres)	V (2,400 acres and more)
Automotive equipment:				
Pickups	2	2	3	4
Truck-flatbeds	1	2	3	3
Trailers	1	1	3	3
Wagons	1	1	3	3
Implement carryalls	1	1	1	2
Power equipment:				
Crawler tractors 50 CDB HP	-	-	1	2
75 CDB HP	1	1	1	2
100 CDB HP	-	1	1	1
Wheel tractors 20 CDB HP	1	1	-	-
30 CDB HP	2	2	3	5
40 CDB HP	-	1	2	4
Land preparation equipment:				
Chisel	1	1	2	2
Discs up to 8'	-	1	-	-
8' to 10'	-	-	1	1
10' to 14'	1	1	1	2
14' to 16'	-	1	1	1
Harrows - spike 12'	1	1	1	1
Harrows - spring 12'	-	1	1	1
Rollers 12'	1	1	1	2
Tool bars (wheel tractors)	2	3	4	6
Ditcher	1	1	1	1
Planting and cultivating equipment:				
Planters	1	2	3	4
Grain drills	1	1	1	1
Cultivators - 2 row	2	-	-	-
4 row	-	2	3	5
Sprayer - 300 gal.	1	1	1	1
Land leveling equipment:				
Landplanes - 12' x 60'	-	1	1	2
Scraper	1	1	1	1
Grader	-	1	1	1

[a] Sample of 49 vegetable crop farms; Imperial County, 1959.

[b] Size I (0-160 acres) operations are assumed to contract for all machine work.

Figure 1A Average total cost curves for each machinery combination and envelope or planning curve (owner-operator FC-II cropping system)



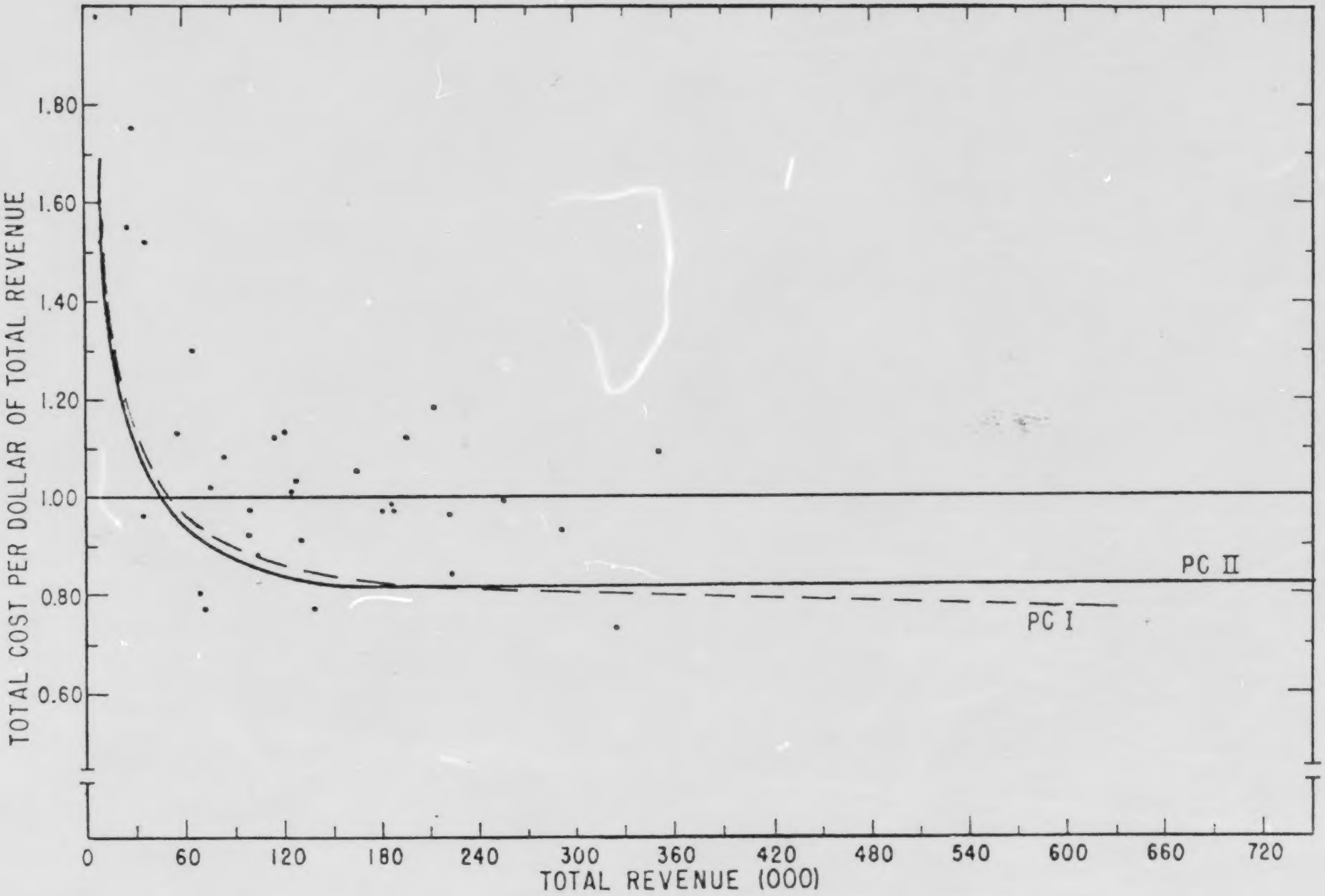
One study, that of Yolo Co. cash crop farms, provides a little insight into the differences between the sythetically derived long run average cost curve analysis, described above, and the actual performance of farms of various sizes. Figure 2A provides a picture of the estimated average cost curves along with plots of the performance of different farms. It should be remembered that before the individual farm's performance was plotted, its yields and prices were first "normalized." Thus, if small farms were to have higher yields, it would not appear in these plots. Likewise, if large farms were to obtain better prices (which is unlikely in cash crops) it would not be reflected in these plots. The important point to note however, is that the scatter of plots is generally above the least cost line and highly variable. Some farms in the smallest sizes perform better than they are supposed to while some of the largest farms perform much worse than they are supposed to. Although more of the small farms are above the break-even point, there are significant numbers of large farms above this point too. Whether the "non-normalized" performance of these farms would drastically alter these plots is not known. If a statistical regression were to be applied to these actual observations, it is possible that it would reveal some advantage of size, but clearly size is only one of many variables influencing profitability. In short, there is a substantial discrepancy between the actual performance of farms and the performance implied by these studies.

These studies all conclude that fairly large-sized farms in terms of sales and in terms of acres are "optimal." By optimal is meant they earn the greatest return per dollar of expenditure. However, in Imperial County all farms of all sizes were found to be "profitable" in the sense that income was sufficient to cover costs. In Yolo County small farms were found to be unprofitable, but no consideration was given to machinery renting or contracting, as in Imperial County.

These studies also indicate that the degree of advantage conferred by large size, even if farms were to behave efficiently, is very small. For example, in Yolo County the advantage of a 600-acre farm in comparison with a 250-acre farm is about 15 percent lower costs, while the advantages of a 2,000-acre farm in comparison with a 250 acre farm is about 18 percent lower costs. Given the substantial variation in the performance of farms, from such factors as access to transportation and water, soil quality, management differences in technological costs of these magnitudes (and they are smaller for vegetables) may be easily offset. This explains why the scatter of actual farm performance appears to bear so little relationship with the long-run average cost curves.

One final point regarding these studies, it should be noted that very little attention was given the small-sized farm. Farms of less than 50 acres of vegetables and 100 acres of field crops were not even examined. Yet 50 percent of the vegetable farms in the early 1960s were less than 50 acres. The small farmer may well have very different ways of producing his crops. For example, he may use old equipment which is not expensive to own, he may perform his own labor rather than hiring tractor drivers, and thereby reduce his direct cash costs, and he may use different cultural practices which confer higher than average yields. These differences could make his operation effective even though it does not appear so from

FIGURE 2A COMPARISON OF PLANNING CURVES DERIVED FOR TWO BUDGETING SITUATIONS AND SAMPLE FARM OBSERVATIONS.



the analysis of these studies which take none of these factors into account. Much more detailed analysis of the existing practices of small farmers and the potential technologies they could employ would be necessary before any substantial comparison between small and large farms can be made.

The Use and Abuse of Cost-Size Studies

In sum, all we can say on the basis of these economies of size studies is that a wide variety of farm sizes appears to be potentially profitable from the point of view of a limited choice of technological options. There is little basis for basing public policy on farm size on these limited pieces of research. Much more work must be done before we can say much about the differences between large and small farmers.

This is not to deny the prevalence and dominance of the large farm in California agriculture. The question is, does this dominance arise because of inherent efficiencies, as argued by these economies of size studies, or because of other factors? The answer seems to be that farm size in California is the result of historical and institutional forces, including those which affected the distribution of land and the development of a large, and low-paid pool of workers available for agricultural work. The economies of size studies tend to rationalize these policies; they do not shed much light on why some farms have been able to dominate the marketplace. To drive home this point, a study of corn farms in the midwest, using the same basic methodology of the California studies, found that 5,000-acre farms were substantially more efficient to run than 500-acre farms, and yet in most of the family farm states there are virtually no 5,000-acre farms, and very few of more than 1,000 acres. Thus, in the family farming states the same economic conditions appear to exist as in California and yet in one environment these conditions lead to large farms, in the other they do not. Are family farmers irrational not to take advantage of the opportunities? Or perhaps there is something wrong with the studies. What appears to be missing is any analysis of the dynamic processes whereby farms were allowed to become large. A static economic analysis cannot capture this reality; we must look to history for these answers.

This critique is not intended to imply that there are no economies of size; it is, rather, intended to show we know very little about the magnitude and source of the economies which exist. Evidence presented in the text shows that larger farms appear to be more profitable, but we do not know whether this profitability derives from advantages in marketing, labor, technology, water, or other factors.

In answer to the question, are these economies of size becoming more or less important over time, we do have some indirect evidence which suggests that there has been relatively little influence of the economies of size on California agriculture in the past ten years. If economies of size were important, we would expect to find a greater increase in those farm sizes which are above the minimum efficient sizes and a concentration of production on these farms. For example, in cash grains, 40 percent of the farms were over 600 acres in 1964, while in 1974 35 percent were larger than 600 acres. There has been some concentration of production on these larger farms; 63 percent of cash grains were produced on farms of this size in 1964 while in 1974 about 67 percent of output was produced on these farms. However, given the increasing costs and developments in technology, it is somewhat puzzling why there are not more large cash grain farms today and why there has been so little additional concentration of production in the intervening years. This and the evidence in the following tables suggests that economies of size have had only a small impact on the size of farm in the past 10 to 15 years. In fact, the most recent evidence suggests some decrease in the average size of farm in the State.

These considerations suggest we do not have a very accurate understanding of the factors contributing to a farmer's success. The size of operation, the number of acres, the sophistication of the equipment may have some influence, but as long as the farm is large enough to provide the individual farm with enough income to pay his bills and his labor, there is little reason to believe that such a farm is significantly more costly to operate than a much larger farm. From the point of view of public policy, it makes just as much sense to make the family farm the basis of production as it does the industrial farm--until more convincing arguments are developed on the basis of actual empirical evidence.

SALES DISTRIBUTION FOR CASH GRAIN FARMS--1964-1974 (1974 DOLLARS)*

Sales Class		$100,000+	$99,999-40,000	$39,999-20,000	$19,999-10,000	$9,999-5,000	$4,999-2,500
1964	Dollars (1,000,000)	339.6	39.5	13.1	5.1	1.3	.26
	Percent	85.1	9.9	3.3	1.3	14	.07
1974	Dollars (1,000,000)	403.6	41.8	13.5	5.6	2.3	178
	Percent	86.3	8.9	2.9	1.2	.5	.2

NUMBER AND PERCENT OF CASH GRAIN FARMS--1964-1974 (1974 DOLLARS)*

Sales Class		$100,000+	$99,999-40,000	$39,999-20,000	$19,999-10,000	$9,999-5,000	$4,999-2,500
1964	Number	1067	646	437	325	163	92
	Percent	39.1	23.6	16.0	12.0	6.0	3.4
1974	Number	1008	619	465	389	321	218
	Percent	33.4	20.5	15.4	12.9	10.6	7.2

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*Source - Census of Agriculture, 1974, California.

NUMBER AND PERCENT OF FRUIT AND TREE NUT FARMS--1964-1974 (1974 DOLLARS)*

Sales Class		$ 40,000+	$39,999-20,000	$19,999-10,000	$ 9,999-5,000	$4,999-2,500
1964	Number	4339	3952	4631	4588	3381
	Percent	20.8	18.9	22.2	22.0	16.2
1974	Number	6911	4386	4427	3573	2989
	Percent	31.1	19.7	19.9	16.0	13.4

SALES DISTRIBUTION FOR FRUIT AND TREE NUT FARMS--1964-1974 (1974 DOLLARS)*

Sales Class		$ 40,000+	$39,999-20,000	$19,999-10,000	$ 9,999-5,000	$4,999-2,500
1964	Dollars (1,000,000)	529.8	111.7	66.9	33.3	12.5
	Percent	70.1	14.8	8.8	4.4	1.7
1974	Dollars (1,000,000)	1173.3	123.9	63.4	25.9	10.1
	Percent	84.0	8.9	4.5	1.8	.7

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*Source - Census of Agriculture, 1974, California.

NUMBER AND PERCENT OF VEGETABLE AND MELON FARMS--1964-1974 (1974 DOLLARS)*

Sales Class		$ 40,000+	$39,999-20,000	$19,999-10,000	$ 9,999-5,000	$4,999-2,500
1964	Number	1544	264	221	168	71
	Percent	68.1	11.6	9.7	7.4	3.1
1974	Number	1461	206	167	127	86
	Percent	71.4	10.1	8.2	6.2	4.2

SALES DISTRIBUTION FOR VEGETABLE AND MELON FARMS--1964-1974 (1974 DOLLARS)*

Sales Class		$ 40,000+	$39,999-20,000	$19,999-10,000	$ 9,999-5,000	$4,999-2,500
1964	Dollars (1,000,000)	518.0	7.7	3.1	1.2	.27
	Percent	97.6	1.4	.6	.2	.05
1974	Dollars (1,000,000)	1024.7	6.1	2.3	.93	.32
	Percent	99.1	.6	.2	.1	.03

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*Source - Census of Agriculture, 1974, California.

NATURAL RESOURCES TASK FORCE

FINAL REPORT

Small Farm Viability Project

November 1977

ABSTRACT

NATURAL RESOURCES TASK FORCE

The Natural Resources Committee[1] has examined the different effects of various resource management polices on family farms and larger-than-family farms and has also investigated the environmental effects of large and small farms. The principal charge of the Committee, however, was to determine the effect of public resource management policies on the future viability of small family farms. Although the definition of a family-sized farm will vary as different crop and livestock operations are considered, several general observations can be made.

The first observation of note is that costs of production and profitability do not appear to change significantly as the size of operation varies. A recent analysis of data from the 1974 farm census in California shows that farms in three major categories having gross sales between $20,000 and $40,000 annually showed profits nearly identical to those of much larger operations with gross sales ranging from $40,000 to $100,000. Data also indicate that large and small farms produce roughly equivalent tonnage per acre of a given crop. Production depends more on factors like soil quality, water use and climate than on the relative size of a farm.

A second observation is that experience and some research show a tendency for larger farms to substitute capital and resources for labor. Economic factors are largely responsible for this trend. Since large farms depend more heavily on hired management and labor, managers have traditionally sought to minimize the hours of labor required. This trend has been slowed somewhat by the tendency of smaller farmers to adopt the technologies of their larger competitors and by the rapid increases in costs of energy, machinery and other nonfarm inputs during recent years.

Management is a critical factor in any farming operation, whether large or small. The family farmer, who is both manager and laborer, has an opportunity to observe the results of his management decisions more closely and to supervise the implementation of his decisions. The family farmer must also make a commitment to the long-term productivity of his property as the principal (and often the only) asset of his estate. However, the farm manager, who is more common to larger farms, is judged primarily on his ability to show a maximum profit each year. It is reasoned, therefore, that given comparable skills, the family farmer has incentive to be more frugal with his resources and is more likely to accept short-term sacrifices, if necessary, to maintain the long-term productivity of his farm.

The role of public institutions managing agricultural resources is critical. Policies applied to the management and use of these resources will largely determine the distribution of benefits derived from their

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[1] Editor's Note: The Natural Resources Task Force throughout this document refers to itself as a Committee.

development. In formulating management policies, public decision-makers must consider the immediate social and economic effects of resource distribution as well as their effects on future generations. The Natural Resources Committee has formulated both general and specific recommendations for resource management.

The Natural Resources Committee has recommended that the State establish a land transfer fund to help new farmers acquire access to land and that the State also take an active part in the transfer of "excess" lands sold under federal reclamation law. The Committee has also recommended that water policies be amended to recognize the differences between large and small farmers in water distribution. New technologies will be needed to protect soil quality and reduce the heavy dependency of agriculture on fossil fuels and chemicals.

All of these recommendations are discussed fully in the report. The essence of the report, however, is that state, federal and local governments now play key roles in the management of resources vital to agriculture. If the family farmer is to survive, all levels of government will have to be more sensitive to the effects of their management policies on him.

FINAL REPORT

NATURAL RESOURCES TASK FORCE

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INTRODUCTION

The Natural Resources Committee has had three major responsibilities within the Small Farm Viability Planning Project. The first responsibility of the Committee was to review the findings of the other five task forces and evaluate the implications of their findings for future management of agricultural resources. The Committee's second charge was to assess the differences, if any, of environmental impact between large-scale and small-scale farms. Finally, the Committee was responsible for analyzing the effects of alternative public resource management policies on family farms and larger farms. All three elements have been necessary for deliberations of the Committee; however this report will deal primarily with Committee findings and recommendations respecting public policies that will affect the farm.

The Natural Resources Committee represented a broad range of expertise in farming and resource management. Committee members included persons who had knowledge of land-use planning policy, land and water development, agricultural economics, soil management, and energy. Committee members represented the University of California, farmers, environmental organizations and private institutions, as well as the Executive and Legislative branches of State Government. Several Committee members had also had personal farming experience. The Committee report draws heavily on the experience and personal knowledge of the members.

The Committee has reviewed relevant studies of the productivity and resource consumption of both large and small farms. The relationship between labor and resource use was analyzed, and the role of public institutions was also considered.

FARM SIZE, EFFICIENCY, AND RESOURCE DEMANDS

"It can no longer be farming as usual. The costs in energy and other human and natural resources are simply too high."

- Bob Berglund, Secretary of Agriculture[1]

American agriculture is highly consumptive of resources. Aggregate statistics show that the U.S. food system consumes more than ten calories of fossil fuel for each calorie of food delivered to the U.S. consumer. According to Earl Butz, agriculture is the petroleum industry's largest customer.

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[1] Testimony in Agricultural Research and Education, Hearings before the Subcommittee on Department Investigations, Oversight, and Research of the Committee on Agriculture, House of Representatives, 95th Cong., 1st sess. on HR 4394 and 4863, March 21 and 22, 1967, p. 194.

In California, the ratio of energy input to energy output is even more unfavorable for several reasons. First, agriculture in California is more highly mechanized than in most other states. Second, California agriculture produces many highly valued specialty crops which are more demanding than the row crops which dominate most of U.S. agriculture.[1]

In strictly business terms, the substitution of mechanical energy for human labor power makes sense. It is profitable. The farmer also substitutes machinery for labor to avoid personnel conflicts. Looking at the situation from the point of view of society, however, can cast some doubt about the wisdom of the degree of mechanization of agriculture in California. This doubt stems from the fact that wages are a cost to the farmer but a benefit for society as a whole. In adopting the social perspective, the relative costs of mechanical energy and human labor power become irrelevant. The question must then be framed in terms of whether or not the labor and resources used in agriculture can be better used elsewhere.

Suppose that state policies would increase the amount of labor used in California agriculture. Presumably, the resulting employment would replace resources which might otherwise be required in California agriculture. The freeing up of these resources could make a significant contribution to the health of the economy of the nation. For example, current Balance of Payments figures suggest that the U.S. will have difficulty sustaining the present level of oil imports. Suppose that oil imports were cut back by one million barrels per day. Assuming that the Gross Domestic Output of the U.S. economy were at $1.52 trillion, each barrel of oil would be worth $174 to the total economy, according to a report published by the U.S. Department of Agriculture.[2]

How well can the small farm serve as a vehicle to create employment while conserving resources? According to aggregate statistics for the U.S., the small farm does remarkably well in conserving resources.

In Table I farmers are categorized according to gross sales. These represent standard farm-size classifications used by the U.S. Department of Agriculture. The first point to notice is the difference between the shares of land (column 2) and realized net farm income (column 6). If large farmers need more than one percent of the land to produce one percent of the realized net farm income, we can infer that large farms are

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[1] The influence of cotton cannot be ignored. Although the seeds may be used for fuel, predominantly nonfood crops such as cotton or tabacco cannot help but lower the ratio of energy output to energy input.

[2] J. B. Penn and George D. Irwin, "Constrained Input-Output Stimulations of Energy Restrictions in the Food and Fiber System," Agricultural Economic Report No. 280, Economic Research Service, Department of Agriculture, February 1977.

Table I

Farm Size and Resource Use, 1971

Percent of Total for U.S.

Gross Sales ($000's)	Acres Grown	Cash Receipts	Production Expenses	Pesticide Expenditures	Realized Net Income
0-2.5	6	2.7	3.7	2	7.0
2.5-5	5	3.2	3.2	2	4.6
5-10	7	5.9	5.6	5	7.9
10-20	14	11.0	10.1	11	14.5
20-40	22	20.0	18.4	22	24.6
40+	46	57.3	59.0	57	41.4

Source: Michael Perelman, Farming for Profit in a Hungry World, The Crisis in Capitalist Agriculture (Montclair, N.J.: Allanheld, Osmun & Co., 1977 forthcoming).

not able to get as much production out of an acre of land as small farmers. On the other hand, by a similar criterion, the large farm gives a proportionately larger share of cash receipts. This comparison shows that the larger farmer commands a higher price for his produce, but he realizes a somewhat smaller profit. This indicates that he produces less efficiently at higher cost.

The column for production expenses is also very revealing. This column gives us a measure of how much the different farm classes depend on the market for purchased farm inputs. The figures indicate that small farmers buy fewer inputs per acre and per dollar of realized net income. For example, the smallest category used only 3.7 percent of the production expenses to harvest six percent of the land while earning seven percent of the realized net farm income. Conversely, the largest class of farms, which till only 46 percent of the acreage, account for 57 percent of all expenditures on pesticides and 59 percent of all expenditures for nonfarm inputs.

Additional data concerning the relative production efficiency of large and small farms in California is provided by the 1974 farm census. Data from this census published during the summer of 1977 shows that farms having gross sales between $20,000 and $40,000 produce a margin of profit comparable to much larger farms with gross sales between $40,000 and $100,000.[1]

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[1] Bruce Ferguson, "What the Census of California Agriculture Says about Small Farms", University of California, Davis, September 1977, p. 9.

These data compared farms of four different sizes, classed by gross sales in the categories of: (a) fruit and nut tree farms, (b) cash grain farms, and (c) vegetable and melon farms. The data also showed that in labor-intensive crops (represented by the vegetables and melons category) smaller farms actually showed higher profits. In all three categories the profit margin ranged between 34% and 39% for the two classes of farms mentioned above, and the profit difference was never greater than 2.5%. The average net income produced by farms in the $20,000 to $40,000 class was $11,000.

It is helpful to keep in mind that statistical distortions may occur because relatively small farms producing high-value crops will often appear large when classed by gross sales. Larger farms can also buy inputs in volume at lower cost, making their share deceptively small. However, the data represented here further indicate that there are no appreciable production efficiencies gained by increasing beyond a modest size of operation that would normally be considered within the capabilities of a farm family.

Finally, a survey of research studies on economies of size compiled by the Economic Research Service, U.S. Department of Agriculture, concluded that the most efficient agricultural production unit was the modern one-man or two-man farm.[1] The essential meaning of these studies in the context of this report is that family farms use resources--land, water, energy--at least as efficiently as their larger competitors, and some data indicate they may even use these resources more conservatively.

THE ROLE OF LABOR

The Committee has also been concerned about the relationship between resources and labor. Agricultural employment in California as in the rest of the nation has declined steadily during this century, while the total acreage farmed has increased. Since World War II crop yields have been increased dramatically, and California as well as the rest of the nation currently produces more than domestic consumers demand. The increase in output per worker has resulted largely from the substitution of resources for labor.

Mechanization is the most obvious form of this substitution. Farm machines, constructed predominantly of metal and powered by petroleum fuels, require considerable energy in both their manufacture and operations. Mechanical harvesters often destroy 30-50 percent of the crop.[2] Likewise, high yielding hybrid crops require much fertilizer. The net result of these changes in agricultural technology has been to eliminate much of the drudgery of farming and to keep food prices low.

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[1] "Economies of Size in Farming: Theory, Analytical Procedures and a Review of Selected Studies", Agricultural Economic Report No. 107, Economic Research Service, USDA, 1967. Reported in: Hearings before the Subcommittee on Monopoly, Select Committee on Small Business, United States Senate, 1971.

[2] See: California Agriculture - February 1971, November 1975, January 1976 and December 1976.

An environmentally conscious society, however, has now begun to see the limits of resource development and to question the wisdom of continued substitution of resources for labor. As resource limits are approached by increasing demand, this process also becomes less economically+ attractive.

Census data also indicate that the loss of agricultural jobs in California during the past 25 years has fallen primarily on family farmers and their family members. These statistics are discussed in more detail elsewhere in this report. The pattern, however, is that expanding acreage has kept the hired farm labor force relatively steady in absolute numbers, but family labor has declined steadily.

PUBLIC RESPONSIBILITIES

The role of public agencies in managing natural resources is critical. For example, local governments have important effects on farming economics through local land use planning, zoning and property taxes. The State passed the Williamson Act in 1965 to protect prime agricultural lands from urban encroachment and is now actively considering legislation to strengthen these efforts. Similarly, the State and Federal Governments together provide water to much of the nine million acres of irrigated cropland in California. The University of California and Cooperative Extension provide much of the information used by California farmers in managing their operations. These are but a few examples of the roles public institutions play in managing and developing technologies to manage agricultural resources.

One of the most critical problems facing agriculture today, particularly for new farmers, is rapid inflation in land values. It is a general truism that virtually all land in California has some speculative value. Rising prices for farm products since 1975 and renewed interest in country living by many urban residents have increased the rate of inflation in farmland during recent years. These inflated values often bear no relation to the value of the land for crop production, but they pose severe obstacles for new entrants and for farmers who want to expand their operations. These inflated prices also increase economic pressure on farmers to convert their property to nonagricultural uses.

LAND ACCESS

For the State to adopt a policy of active support for family farms, it will be necessary to develop better means of land access for new farmers. New farmers are critical because the majority of active family farmers in California are approaching retirement. Additional lands now in production are expected to be sold in the coming years to comply with provisions of Federal Reclamation Law. These factors combined can provide many opportunities for new farmers, particularly young farmers, to begin new farms or assume control of existing farms. However, inflated land prices and expensive mortgage capital make entry difficult.

This problem is not unique to California, and other states have taken positive steps to assist young farmers. These programs typically are designed both to protect agricultural lands from conversion to other uses and ease the transfer of land from retiring farmers to new ones. New Jersey, for example, has initiated a program to purchase the development rights to farm properties. Minnesota has begun a program of mortgage loan guarantees for young farmers. Concurrently, nine midwestern states have either prohibited or severely restricted the ownership of farmland by nonfarm corporations to reduce the inflationary impact of their capital.[1] The Canadian Province of Saskatchewan has established a land bank to lease and resell farm properties.

The terms and conditions through which a prospective small farmer first enters into possession of the unit he is to operate are critical to his success. Almost equally critical is the knowledge he possesses of the potential of the unit. In the final analysis, under our economic system, it is presumed that the entering farmer is making, as a matter of free choice, a long-term commitment which includes whatever material resources he has, his labor, his skill, his energy, and his willingness to reside in one place for a period of years, perhaps his remaining life time. His expectancy should not be for speculative gains from the sale of his real property or sudden wealth from rising prices for farm produce. He does have a right to anticipate secure, long-term possession of his farm and regular income sufficient to provide comfort and security through his own efforts and decisions. He and his family must be willing to accept the pros and cons of rural life.

Before the new farmer secures possession he must have arranged for either purchase or lease of the farm. The instruments of possession are then:

(1) a title deed to the property, or
(2) a written lease.

The farmer's principal need is for entry at reasonable prices relative to the productivity of the property and security of tenure.

Cultivating rights are separable rights which a land owner may convey. Once established, such rights become property and can be transferred or sold separately from the residual fee rights. Leasehold rights, some of which are for 99 years, can serve as the basis for mortgages. In essence farm leases and tenancy arrangements are transfers of cultivating rights for a period of time. The terms of the lease are in effect equivalent to the conditional sale of cultivating rights. And when the lease terms are compatible with the lessee's needs for security and income, for his purposes they are superior to fee ownership. This is particularly true when one of the objectives of public policy is to curb speculation in land. Farmers with lease or leasehold rights have the advantage of paying less for their occupancy than if they acquire full title. Presumably, their taxes would be less. Owners of the fee right can receive, for the cultivating right, a series of annual payments which may serve as retirement income or they may expect a lump sum payment which can be used to purchase annuities.

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[1] Council of State Governments, Corporate Farming and the Family Farm, Lexington, Kentucky, 1976.

This discussion should serve to illuminate the principle that small farmer needs for satisfactory land tenure arrangements can be met by cultivating rights. That part of the bundle of rights included in fee simple title beyond cultivating rights exceeds the basic land requirements of small farmers. Purchase of these additional rights imposes an unnecessary burden on the smaller operator including the burden of taxes for rights he does not need and cannot use.

FINANCING THE SMALL FARMER

Whether the small farmer owns assets to reduce his borrowing needs or whether he must finance all needs by borrowing, his costs will be the same for land purchase, machinery and equipment, planting, cultivating, harvest, including insurance, maintenance, repair, depreciation and obsolescence. His annual income must cover these costs and yet leave him a sufficient amount for a reasonable income after basic family living expenses. Here is where he needs help and where public policy becomes important.

The following table compares the annual outlay to defray $100,000 ($1,000 per acre for 100 acres) for 20- and 30-year terms at selected interest rates.

Interest rate	Term years	Monthly payment	Semi-annual payment	Total payment
		$	$	$
4%	20	606	3,636	145,440
4%	30	477	2,862	175,720
5%	20	660	3,960	158,400
5%	30	537	3,222	193,320
7%	20	775	4,652	186,088
7%	30	665	3,992	239,522

If state policy includes an interest rate subsidy, the remaining payment from the operator can be calculated from this table in terms of the total, semi-annual or monthly payment. For example, if the institutional rate is 7% for a 20-year term and state policy permits 5% for a 30-year term, the state would pay $4,652 semi-annually and the borrower would pay $3,222 semi-annually.

In this case the semi-annual subsidy would be $1,430 but over the full term the borrower would pay a total of $193,320 and the state only $186,088, a difference in favor of the state of $7,232. Thus, by adjusting the interest rate and the term of a conditional sales contract, a total subsidy of $95,000 can be provided by the state (the difference in the total payment of $145,440 for a 20-year sales contract at 4%, and $239,000, the comparable amount for a 7% contract with a term of 30 years).

Consider also that the entryman may also have "built-in" equity if he is buying land sold under recordable contract in a Bureau of Reclamation service area. This equity accrues from the requirement that such land be sold at a price which does not include project benefits. In practice, the sale price averages 50% of the full market value, but private lenders have commonly granted mortgages for up to 70% of the full value. This practice creates an exceptional opportunity to capitalize new farms, but it is no guarantee that this opportunity will benefit new or disadvantaged farmers. The creation of such opportunities will require the active participation and commitment of the State. New farmers will need supervised credit on favorable terms and technical assistance appropriate to their needs. The Federal Government and the State have both had experience with such programs.

The new farm under supervised credit should be viewed as a partnership composed of the farmer, the lender and the technical adviser until the farmer has established a successful track record. It is essential that the farm be located in an area of favorable soil, topography and drainage. A generation ago, agricultural economists found that "poor farmers always went to the poor farms." On analysis, the reason for this phenomenon was obvious. The poor farmer was ignorant and poor. He did not realize the handicap of the inferior quality of the farm and in any event his resources did not permit acquisition of a better quality farm. New entrymen should be discouraged from going to inferior farms which will inevitably contribute to insecurity. Lenders can be of assistance by demonstrating to the new small farmer the amount and terms of credit he may be eligible to receive and the amounts to be repaid at designated intervals. The new farmers should receive expert advice on what will be required to operate the farm, what will be expected by lenders and other business associates, and what return he should expect on the farm investment. The prospects for success are best where the quality of farm property is good.

COMMITMENT

The foregoing discussion is based on the premise that the State or Federal Government or both are committed to the establishment and confirmation of a substantial number of small farmers in the intensive, irrigated agriculture of California. A further premise is that these small farmers have access to physical resources of land and water of sufficient quality to insure adequate productivity under normal management conditions sufficient to provide a comfortable family living over a long period. Still another premise is that the small farmer fully understands the obligations, limitations and benefits of his commitment and is satisfied with them.

For many decades it has been the policy of the Federal Government and the State of California to protect and preserve wilderness areas and other resource lands of special beauty or recreational value. This preservation of natural heritage for future generations is clearly a proper responsibility of government. The time has come for the public to apply the same commitment to preservation of agricultural lands on which all must depend for food and fibre. The State takes strong positive action to preserve these vital lands and establish programs of financial assistance to assure access to them by family farmers.

ACCESS TO WATER

The survival of family farmers in California may depend on access to water even more heavily than on access to land. Throughout the arid West, land has commonly been available at low prices when water was not available.

Although in years of normal precipitation there is adequate rainfall in the western states, the rain is not evenly distributed. Many areas that have fertile soils and long growing seasons are deserts in their natural state because rainfall is not sufficient. Modern irrigation technology has made many such areas bloom in California, and irrigation is largely responsible for the State's massive agricultural output.

Committee members investigating water use found that the literature available does not indicate there are major differences in water use for a given crop whether it is farmed in large or small units. The only major differences regarding scale appear to be (1) differences of capital available for private development of ground water and (2) differences of political influence in directing the distribution of publicly developed water supplies. However, some studies do show differences in the closeness and quality of farm management. One may infer that the small owner-operator who manages the rest of his operation more closely will also manage his irrigation more closely than would hired management and labor. The potential for waste, therefore, may be less.

Since small commercial farmers today largely adopt the same technology used by their larger competitors, there is little reason to believe that the level of pollutants in irrigation drainage will be significantly different from large and small farms. Silt, salt and nitrate pollution are problems faced by both large and small farming operations.

The effects of water management policy on the scale of farming are more severe than the effects of different sized farms on water quality and use. During the twentieth century, irrigation development has been the principal tool of public policy in the West for increasing agricultural production and for creating new economic opportunities in farming. Much of the political history of California is the political history of water development, and the struggle over land and water goes on today. In addition, the 1976-1977 drought has demonstrated the need for improved management of water supplies.

Two principal differences between large and small farmers with respect to irrigation are that larger farmers have greater capital assets to develop irrigation systems privately, and smaller farmers, lacking this resource, are more vulnerable to the loss or reduction of their water supplies. For example, during the drought it has been necessary in some areas to reduce water deliveries by 50-75%. Farmers adopt to these reductions in various ways, but generally the result is a corresponding reduction in crop production.

If losses of water and production fall by equal percentages on large and small farm operators, the farmer who would normally net $100,000 in family income is hurt proportionately less than the farmer who would normally net $20,000 or less. The larger farmer has greater capital assets to use as collateral for short-term loans to drill new wells and cover other expenses to minimize his production loss. For the large farmer the reduction in water will mean a financial setback; for the small farmer it may mean bankruptcy.

The Bureau of Reclamation has a major influence in California agriculture. The objectives of federal irrigation are to bring arid and otherwise idle lands into production, and to provide opportunities for family farmers. Controversy has raged for many years over the administration of Reclamation laws, but there can be little doubt about their intent. In the words of E. F. Newell, the first Commissioner of Reclamation:

> "It is not to irrigate the lands which now belong to large corporations or to small ones; it is not to make these men wealthy; but it is to bring about a condition whereby that land shall be put into the hands of the small owner, whereby the man with a family can get enough land to support that family, to become a good citizen, and to have all the comforts and necessities which rightly belong to an American citizen." (Address to the National Irrigation Congress, 1905.)

These purposes have remained unchanged. In April 1976, a unanimous, three-judge panel of the Ninth Circuit Court of Appeals in San Francisco found in the case of U.S. vs. Tulare Lake Canal Company:

> "These purposes are to open private land to settlement by farmers of modest means, to insure wide distribution of the benefits of federal investment in the reclamation project, and to prevent private landowners from realizing a disproportionate windfall advantage from enhanced productivity and land values because of the project."

The benefits of the Reclamation program are worth many millions of dollars annually to California agriculture.

Recent court decisions have reaffirmed the basic principles and requirements of Reclamation law, which raises the prospect that at least 1,231,000 acres of federally irrigated farmland in the Imperial and San Joaquin Valleys will be sold at regulated prices to family farmers between now and 1997. These sales will spread the benefits of federal irrigation much more broadly and create opportunities for hundreds of new farmers.

This prospect, however, is a planning and administrative challenge of immense proportions. In some areas whole new communities may be needed, and a different agricultural support structure will be required. This change carries potentials both for positive economic and community development and for severe economic disruption. The State should accept this challenge, and work with farmers as well as local governments to make the promise of reclamation a reality.

The Legislature should investigate the effects of property-weighted voting in water utility districts. Such districts often provide irrigation and municipal water, but recent studies show that some districts have not had contested elections for several decades. Board decisions may also reflect the personal interests of board members.

Finally, the Committee finds that water management practices do not reflect adequate long-range planning to anticipate drought contingencies. The Department of Water Resources has done a remarkable job of managing available water supplies during the 1976-1977 drought, but supplies are limited. A third year of severe drought would be disastrous, and many farmers--both large and small--would be out of business.

Future water planning should include conservation strategies and alternative methods of storing emergency supplies. Contingency planning should also include consideration of energy shortages that develop under drought conditions.

SOILS AND ENERGY

Two areas where the Committee found a need for improved management practices were soils and energy. "Modern" agricultural methods are highly energy-intensive and cause various types of soil damage. Energy is required to manufacture and power machinery, manufacture fertilizers and other agricultural chemicals, dry grains and transport materials to and from the farm. Machinery and chemical use cause problems in the breakdown of soil structure and depletion of important nutrients.

Although erosion in California is generally less severe than in other parts of the country, some areas are suffering severe erosion. Salt building is a serious problem in the Imperial and Southern San Joaquin Valleys, and nitrate pollution is increasing.

These problems are not as severe when using more traditional farming methods. These methods are often characterized today as "organic" farming to connote the employment of natural fertilizers, no pesticides and more labor.

It may not be reasonable to expect that a substantial number of commercial farms will return to these methods in the foreseeable future, but wise resource management and planning require that methods be found to reduce agricultural dependency on nonrenewable resources, particularly energy, and to stop the loss of soil quality.

Both of these problem areas deserve extensive treatment beyond the scope of this report, but the Committee finds there is a need for improved technologies in both of these areas and encourages the universities to intensify their research efforts in these fields.

RECOMMENDATIONS

The Natural Resources Committee recognizes that one of the key roles played by public agencies in agriculture is in the management of natural resources that contribute to farm production. A healthful environment is essential to the biological processes of which agriculture is composed. California is uniquely blessed in soils and climate, but the State's natural conditions create resource management demands which are also unique. It needs no documentation that California agriculture is extraordinarily dependent on irrigation and that competition between alternative land uses is severe. These conditions have demanded that State Government take a very active role in managing agricultural resources, and this role will take on ever-increasing importance as competition for scarce resources continues to increase.

In considering its charge and in formulating the following recommendations, the Natural Resources Committee has analyzed the demonstrable differences, if any, between large-scale and family-sized farms on the environment. The committee has also analyzed the differing effects of various public resource management policies on family-sized and larger-than-family-sized farms. The committee could not reasonably assume that smaller farms would necessarily use "organic" farming methods, but it was assumed that family farms would, of necessity, be more closely managed and would be less likely to substitute capital and resources for labor than their larger competitors.

The Natural Resources Committee has reached consensus on recommended State policies and actions for the management of specific resources which will be detailed below. In addition, the committee has general policy and institutional recommendations which cut across resource lines. The general recommendations of the committee are as follows:

General Recommendations

I. Priorities

The first priority for formulating management policies for all agricultural resources should be that the policy will protect or enhance the long-range productive capacity of all agricultural resources.

By establishing this principle, the State commits itself to maintaining a quality environment that will ensure that California remains a major agricultural producer. Long-term productive capacity will not be sacrificed to short-term gains in production. This policy is in the interests of the family farmer as well as the rest of society, because the farmstead normally represents the principal asset of the farmer's estate, and it provides society with food, fiber and environmental amenities.

The second priority for State policy should be that all benefits derived from the public development or management of any resource shall be distributed as broadly as economically feasible.

Such a policy is necessary to ensure that no individual or group benefits extraordinarily from investments made by the public-at-large. It is also necessary to prevent excessive concentration of control over resources that are vital to all of society, to preserve opportunities for entry into food production as an occupation, and to preserve competition within the food and fiber system for consumer protection.

II. Institutions

The Governor and the Legislature should establish either a new office or a special unit within the Office of Planning and Research to analyze the social, economic and environmental effects of agricultural resource management practices and to advise the Governor, the Legislature, and the Public on policies to protect and enhance agricultural productivity. Such office or unit should also continuously monitor the status of the family farm within California and the overall functioning of the State's agricultural system.

Agriculture and its related industries constitute the largest single sector of the California economy, and they have major effects on the environment and social structure of the State. The influence of agriculture in California is such that it deserves a degree of comprehensive oversight and planning that is not currently provided by the existing structures of State Government. The proposed new office or unit should be mandated to work cooperatively with all departments of State and Federal Governments as well as with the University of California. However, the nature of its responsibilities would be so broad and many relevant issues are so sensitive that the proposed office or unit should be independent of the interests of any functional agency, and it should be directly accountable to the Governor and the Legislature.

III. Research and Information

Publicly supported agricultural colleges within California should be directed by the Governor and the Legislature to develop improved resource conservation and management practices tailored to the operations of family-sized farms and be further directed to distribute such information through their own facilities as well as through community colleges and high schools.

This recommendation stems from the two policy priorities in Recommendation I, i.e., long-term productivity of resources and broad dissemination of public investment. Publicly supported university research is regarded by the committee as a public resource that is vital to the wise management of natural resources. For this research to be used effectively in the public interest, it is essential that the public agencies providing the lion's share of research funds take a more active interest in determining the interests to be served and the problems to be addressed by such research. The Committee supports the principle that those who can least afford to purchase research services from the private sector should have first call upon publicly supported research.

IV. Public Works

The State and Federal Governments should evaluate all future public works for the support of agriculture for their effects on the size of operations that will be most economically feasible to use the facilities.

The design of public works systems (roads, irrigation, electricity, natural gas, etc.) will determine, in large part, the size of farming operation that is most feasible in a service area. For example, the distance between lateral canals and turnouts on a distribution system for irrigation water will largely determine the size of parcel that can be most efficiently and economically irrigated from the system. Similarly, the presence or absence of other support systems will influence whether a resident or absentee system of land tenure and operation will be fostered. Once the State has determined what type of agricultural system is to be encouraged by public policy, decisions concerning the provision of public works in agricultural areas should be consistent with that policy.

V. The Role of Federal Reclamation Policy

The State should seize the opportunity presented by prospective sales of land in California under Federal Reclamation Law to establish pilot programs to assist family farmers.

The Reclamation program was designed to develop the two most basic agricultural resources--land and water. The acreage limitation and residency requirement were written into the law to ensure broad distribution of project benefits to family farmers. Recent court decisions and administrative changes by the Bureau of Reclamation raise the prospect that nearly two million acres of rich California farmland will be broken into smaller parcels and sold to family farmers during the next ten to fifteen years. If this important shift in land tenure is permitted to take place haphazardly, major economic dislocations may occur. If, however, the State takes an active role in planning for this change, it represents an opportunity for extensive positive rural development.

Specific Recommendations

The Natural Resources Committee recommends several new policies for the management of specific resources. These recommendations are as follows:

Land

1. The State should take firm action to protect highly productive agricultural lands.

   Smaller family farms inherently have smaller capital reserves, and their smaller equity positions normally give them less credit when borrowing is necessary. Family farms are, therefore, more vulnerable to natural calamities and varying market conditions. There is greater opportunity to improve the security of family farmers when they have access to farm properties capable of producing relatively high incomes. The protection of high quality farm properties from urban encroachment and from destructive farming practices is important to the future security of family farmers. The Williamson Act has proved inadequate. Therefore, the legislature should consider purchasing development rights, establishing urban limits and other measures to protect prime agricultural lands.

2. The State should establish programs to improve the access of farmers of limited means to good quality farm properties.

   The agricultural system is continually revitalized by the entry of new farmers. However, rapid inflation in recent years has made entry into farming increasingly difficult. Much of this increased value is often speculative in nature, which increases the economic pressure on farmers to convert their properties to other uses. The State can improve access to farming by establishing a land transfer fund, establishing a land bank or a combination of the two. Such mechanisms may also be used to stem the inflation in land prices. The committee will defer to the Finance Task Force to recommend the best finance vehicle, but we recommend that the State take positive action to preserve California's productive lands and improve access to them by family farmers.

3. The State should review leasing and other use practices of all arable State lands.

   Arable State properties may be used for farmer training and may also be used to reduce the capital requirements of new farmers through leasing.

Water

1. The State should adopt a policy of support for strong enforcement of all provisions of Reclamation Law and should seek an active role in the administration of land sales and water distribution.

The Reclamation program was designed to assist family farmers through irrigation, and this program has a major impact in California. The State should develop a role commensurate with its interest.

2. The State should review laws providing property-weighted voting in State-chartered special districts providing water.

   These practices concentrate control of water into the hands of relatively few property owners in many areas. Recent studies show that this works severe hardships on smaller operators.

3. The State should improve planning to prepare for dry year contingencies.

   Such practices would include storage of surplus water in groundwater basins during "wet" years, encouragement of improved management of federal supplies based on current drought experience, and establishment of a "lifeline" supply to all farmers when deliveries must be reduced.

Soils Management

1. The State Water Resources Control Board, University of California and Soil Conservation service should work with farmers to minimize soil losses.

   Due to natural conditions, soil erosion is less severe in California than in many other parts of the country. Erosion losses can be reduced, however, by improved management practices.

2. Research is needed to maintain and improve soil condition.

   Farmland may be lost through damage to fertility and structure as well as through urban encroachment and erosion. More concern needs to be given to maintaining physical and chemical properties for sustained production.

Energy

Intensify research to develop energy-saving farming practices.

Current farming practices are heavily dependent on petroleum based fuels, chemicals and other nonfarm inputs. The committee does not expect that agriculture can revert to all-organic fertilizers and animal traction, but new practices are needed to reduce farm dependency on nonfarm inputs.

The recommendations presented here can both improve the competitive position of the family farmer within agriculture and also improve the long-term productivity of agricultural resources generally.

COMMUNITY SERVICES TASK FORCE

FINAL REPORT

Small Farm Viability Project

November 1977

ABSTRACT

COMMUNITY SERVICES TASK FORCE

The Community Services Task Force has analyzed the relationship between the family farm and the farm community. Much of the information presented in the report is based on sociological and economic studies conducted by the University of California. These studies show that where small family farms predominate there is more development of rural communities, and the quality of community life is better. Such communities have a higher volume of business activity, better schools and other public services, greater stability, and more social activity. The studies also show that these relationships between farm size and community character hold constant over time.

The Task Force has focused its attention on the problems facing local governments and on mechanisms to strengthen the hand of local officials in confronting these problems. Local government is the principal agent for broad social and economic change in a community, and it is vital that State and local governments work closely together.

The Task Force has made recommendations for changing political and fiscal relationships between the State and rural communities as well as recommendations for promoting economic development. The objective of these recommendations is to help rural leaders overcome some of the institutional barriers to development that now confront them. The Task Force has reached a consensus that these recommendations will help to strengthen the rural community as a necessary support to the family farm.

FINAL REPORT

COMMUNITY SERVICES TASK FORCE

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I. INTRODUCTION

The Community Services Task Force is responsible for assessing the role played by farming communities in supporting family agriculture. The Task Force is composed of representatives from nonprofit organizations serving the rural poor, from State agencies responsible for promoting economic and community development, and from the University of California. All of the Task Force members have extensive experience in working with rural communities and with the rural poor.

The Task Force reviewed published literature and unpublished studies on conditions in rural California communities and on current social, economic and demographic trends. Task Force members also interviewed officials and employees of small, rural communities concerning the problems they encounter and did some primary research.

The Task Force concentrated its investigations on impediments to the achievement of three goals that all communities have in common: (1) political self-determination, (2) economic self-sustenance, and (3) cultural enrichment. Working from findings concerning the mutual dependency of the farm and farm community, the Task Force concentrated its analysis on problems facing the community. The recommendations of the Task Force are intended to strengthen the ability of local communities to respond to their problems.

This report is organized in three sections. The first will discuss the relationship between the scale of farming and the farm community. The second will discuss the findings of the Task Force on impediments to community development. The final section will present the recommendations of the Task Force.

II. THE RELATIONSHIP BETWEEN FARM AND COMMUNITY

To determine the role played by the farm community in the viability of the family farm, it is important to determine the role of the family farm in the life of the small, remote community. The relationship is inherently one of mutual dependency. Farming operations constitute the economic and employment base of the farm community. The community, on the other hand, provides goods, services, and social activities to farmers and farm employees. These relations are, in part, a function of the size and nature of the farms immediately adjacent to the farm community. Little sociological research has been conducted in this area, but the available information shows a positive correlation between a system of family farms and communities with heightened economic and social activity. The Task Force has drawn on two important studies in this field.

THE ARVIN-DINUBA STUDY

In December 1946, the U.S. Senate Select Committee on Small Business published a now classic study of two communities in the San Joaquin Valley. This case study, conducted by Dr. Walter R. Goldschmidt, of the University of California at Los Angeles, compared the two communities of Arvin, in

Kern County, and Dinuba, in Tulare County.[1] These communities were selected for study because of their similarity in many social and economic respects. The principal difference between the two in 1945-46 was that Arvin was surrounded by large commercial farms, and Dinuba was surrounded predominantly by small family farms. These patterns of farm size remain today, but the communities have changed significantly.

The principal generalization that can be made from the original study by Goldschmidt is that the community serving small farms had a more active economic and social life than did the community surrounded by large farms. The study also implied future development trends for both communities. The Community Services Task Force decided that it would be instructive to reexamine Arvin and Dinuba in 1977 to determine what changes had taken place during the intervening 31 years. The remainder of this section is taken from a report prepared for the Task Force by Steve Peterson, a research assistant with the Department of Housing and Community Development.

The Peterson study once again compared the communities of Arvin and Dinuba to determine the effects that scale of farm operations has on the social, economic, and cultural quality of life. Dr. Goldschmidt's basic thesis was substantiated: the small-farm town of Dinuba still generates a more diversified and a richer community life than the large-farm town of Arvin.

The 1945-46 case study compared Arvin and Dinuba at a time when their population, economic base, environmental setting, and relative location were nearly identical. These similarities provided controls to isolate the effects that the scale of farm operations had on community life. In contrast, the present study analyzes the historical growth patterns of the large-farm and the small-farm community over 30 years. This period was considered long enough to determine whether the tendencies and differences in large-farm and small-farm communities identified in 1945 had magnified, diminished, or stabilized since then. Not all of Dr. Goldschmidt's information could be replicated for this update. In some cases secondary data sources and "best approximations" gathered locally had to be used. The boundaries of the original study area could not be replicated today. The most important limitation to this update, however, is that the two communities have grown in very different ways since 1946. If a social scientist were to conduct the same case study today, he or she would select different communities because the population characteristics of Arvin and Dinuba are no longer truly comparable. The growth patterns of the two communities, however, have been remarkably consistent with the trends indicated in the original study.

Arvin-Dinuba Revisited

Fifteen specific findings derived from the original research were updated (or noted as impossible to update):

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[1] Special Committee to Study Problems of American Small Business, United States Senate, "Small Business and the Community, A Study in Central Valley of California on Effects of Scale of Farm Operations," U.S. Government Printing Office: Washington, December 23, 1946.

1. As in 1945, the small-farm community continues to support more businesses than the large-farm community by a ratio of 2:1.
2. The volume of retail trade in 1976 was greater by nearly 70% in the small-farm community, an improvement over the 61% advantage in 1945.
3. Expenditures for household supplies and building equipment were not available.
4. It was also impossible to determine the number of persons supported per dollar volume of agricultural production.
5. The small farm community has improved its material advantage since 1945, as measured by median family income.
6. In 1976 Dinuba had 2 1/2 times the number of independent business outlets in Arvin, a ratio equivalent to that found in 1945.
7. Farm laborers constituted 37.6% of the large-farm community's labor force in 1970 and only 13.7% of the small-farm community's, compared with 66% and 33% respectively in 1945.
8. The number of physical facilities and public services is still far greater in the small-farm town.
9. As in 1945, there are more schools in Dinuba than Arvin; four elementary schools to two, one junior high school to none, and one high school in each town.
10. The small-farm town still provides it citizens with many more park facilities; five parks to two, and eight playgrounds to none.
11. The small-farm town has more than four times the number of social and civic organizations.
12. Public recreation centers were not touched upon.
13. Today as in 1945, Dinuba supports two newspapers, while Arvin has one.
14. Consistent with 1945, churches bear the ratio of 2:1 in favor of the small-farm community.
15. Local decision-making is more accountable and unified in the small-farm community, whereas in the large-farm town, decisions are made in a confusing and fragmented fashion because of the proliferation of special districts. This reaffirms the 1945 findings.

In addition, several other trends have become apparent since 1945:

- The population of the small-farm community has grown at a faster and steadier rate than the large-farm community.
- The large-farm community has become more dependent on outside sources of funding, partly as a result of an eroded local tax base, while the small-farm community has remained relatively self-sufficient.

Population and Demographic Change

A detailed discussion of changes in population characteristics since 1945 is not possible. General population growth trends are discernible, however, when census data are compared with the original survey data. In making population comparisons, Peterson used only Goldschmidt's town-population figures as a baseline (Table 1, figures in parentheses). Consequently, the information-collection boundaries are not strictly the same, and with regard to Arvin, census boundaries probably shifted between 1950 and 1970 due to the city's late incorporation in 1961.

With these provisos, Table 1 (Population Trends) reveals that Dinuba has experienced relatively steady growth since 1945. For instance, Dinuba's population has consistently increased over 30 years at a rate ranging from 32.6% to 8.5%. Arvin, however, has fluctuated from a rapid growth rate (59.5% between 1945-50) to an absolute decline of 220 persons between 1960-70. Dinuba had a 16.3% greater town population in 1945 (3,750 as compared to 3,139), and by 1974-75 this advantage had increased to 30% (8,590 to 6,013). Another perspective is that Dinuba's population doubled in less than 25 years while Arvin's did not double in 30 years.

TABLE 1

Population Trends

	1945[1]	[4] % Change	1950[2]	[4] % Change	1960[2]	[4] % Change	1970[2]	[4] % Change	1974/5[2]
Arvin	(3,139)	+ 59.5	5,007	+ 6.1	5,310	- 4.1	5,090	+ 18.1	6,013
Arvin & Vicinity	6,236								
Dinuba	(3,750)	+ 32.6	4,971	+ 22.8	6,103	+ 29.1	7,917	+ 8.5	8,590
Dinuba & Vicinity	7,404								

Source:
1. Goldschmidt study boundaries.
2. U.S. Census of Population: 1950, 1960, and 1970.
3. Special Census of Kern and Tulare Counties.
4. Percent change calculated for five and ten year intervals (i.e., 1945-1950, 1950-1960, 1960-1970, 1970-1974/75).

To explain why Dinuba has enjoyed consistent growth while Arvin's population has fluctuated over the years, population trends should be interpreted in conjunction with labor force characteristics and new business formation data presented later.

The demographic comparisons in Table 2 show that the characteristics of the two communities have remained much the same. Dinuba still maintains an older population with smaller families and more education, while Arvin's population is younger and is composed of larger families with less education.

TABLE 2

Selected Demographic Comparisons
1945 - 1970

	Arvin		Dinuba	
	1945[1]	1970[2]	1945[1]	1970[2]
Persons per household	4.23	3.51	3.43	3.09
Median age	20	24.4	27	30.3
Median school years completed	7.6	8.3	8.4	10.4
% owner-occupied housing		51.5		62.0
Median family income	$2,100	$5,903	$2,350	$7,535

Source: [1] 1945 schedule data.
[2] 1970 census.

Other factors indicate that Dinuba is improving its material quality of life over Arvin. The median family income disparity increased from 11% in 1945 to 22% in 1970 and the percent of owner-occupied housing in 1970 was greater by 10.5%.

Employment

Part of the reason why Dinuba enjoyed steady growth and a stable population while Arvin grew erratically over the years can be explained by their relative occupational mix. From the standpoint of understanding the inherent social structure of the two communities and their fundamental social and economic problems, Dr. Goldschmidt determined that their occupational structure was the most significant fact about their population.[1] He found the large-farm population to have a much higher percentage of low-stability farmworkers (57.6% were employed in farm labor compared to only 24.4% in the small-farm community) with relatively little social integration. Table 3 compares the occupational characteristics of the two communities in 1970.

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[1] Ibid, p. 43.

TABLE 3

Occupational Status

	Arvin		Dinuba	
	#	%	#	%
Professional, technical & kindred workers	84	6.1	340	13.2
Managers & administrators	75	5.5	178	6.9
Sales workers	94	6.9	152	5.9
Clerical & kindred workers	92	6.7	404	15.7
Craftsmen, foreman & kindred workers	151	11.0	210	8.1
Operatives, except transport	86	6.3	314	12.2
Transport equipment operatives	46	3.4	177	6.9
Laborers, except farm	67	4.9	100	3.9
Farmers and farm managers	5	0.4	15	.1
Farm laborers and farm foreman	514	37.6	352	13.7
Service workers	133	9.7	311	12.1
Private household workers	20	1.5	24	0.9
Total employed	1,367	100.0	2,577	100.0

Source: 1970 Census.

By combining these figures in broader categories, we find that Dinuba had a much larger white-collar labor force than Arvin in 1970 (53.8% as compared to 36.4%), more blue collar workers (31.1% as compared to 25.6%), and significantly less people directly employed in agriculture (13.8% as compared to 38.0%). In light of the temporary nature of farm laborers' work (67.8% worked 49 weeks or less in Arvin compared to 55.6% in Dinuba),[1] these figures illustrate the unstable employment/population relationship in the large-farm community. They do not, however, reflect the contribution of unpaid family labor more common on family farms.

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[1] Department of Commerce, Census Bureau, 1970 Census of population.

Because the small-farm community has a more diversified employment base than the large-farm community, it is more insulated from external economic changes. For instance, in reviewing the figures on population increases, it was discovered that cotton harvesting was mechanized during the 1950's and as a result displaced workers in the 1960's. This probably explains why Arvin, a community dependent on row crops, especially cotton, for its livelihood, lost population, while Dinuba, where fruit and orchard cropping patterns enjoyed immunity from such technological dislocation, gained 1,804 persons during the same period.

Agricultural Production and Farm Size

One major reason for originally selecting Arvin and Dinuba for a comparative case study was that their agricultural production volumes were equivalent. In other words, the economic base of the two communities was approximately the same in 1945. This, linked with other similarities in population size, environment, and locational advantage, provided controls which allowed Dr. Goldschmidt to isolate the effects that scale of farm operation had on community life. Unfortunately for the purposes of this report, agricultural production volumes for the areas surrounding Arvin and Dinuba were not available, since figures were aggregated by specific crops for the entire county.

Information was solicited by telephone to determine whether the same basic difference in scale of farm operation still applied. Self Help Enterprises, which conducted the survey, supplied the following information (Table 4) from a random sample of 35 parcels within each community. The average parcel size from the sample corroborates that the basic economic unit distinction of 1945 is still valid.

TABLE 4

Parcel Size & Tenure

	Dinuba	Arvin
Average Parcel size	23.94 acres	164.54 acres
Average year deed recorded	1965	1969
No. of corporate owners	3	11
No. of landowners from the community	18	5

Dinuba continues to function as a small-farm community and Arvin as a large-farm community.[1] In addition, the tenure relationships prevalent in 1945 still exist today. More Dinuba residents live on the farm and for longer periods of time than their counterparts in Arvin. From the sample evidence more than 50% of the farms in Dinuba are currently owner-occupied, while less than 15% have the same characteristic in Arvin. In 1945 more than three-fourths of Dinuba farmers owned and lived on the land, compared to 35% of Arvin farmers.

Local Business Activity

A major finding of the original work was that the agricultural income produced in the small-farm community generates more retail dollars locally than does the agricultural income produced in the large-farming community. The economic multiplier in 1945 created $1.71 in Dinuba for every $1.00 of agricultural production while Arvin only generated $1.03 locally from each $1.00 of agricultural production.

Although it was not possible to repeat this kind of analysis due to the lack of data, we did construct a simple population-to-employment ratio. This ratio, illustrated in Table 5, shows that, for each person in the community, 0.27 jobs are created in Arvin and 0.33 jobs in Dinuba. The table also shows a greater proportion of working females in Dinuba than Arvin--probably a result of greater clerical employment in the retail and service trades.

Data was obtained from the Board of Equalization on the number of business permits to see whether Dinuba's dynamic business environment had sustained itself for the past 33 years. Table 5 below shows that the ratio of the total number of outlets in Arvin to Dinuba remains the same: 62 to 141 or 4:9 in 1943 and 96 to 202 or 4:9 in 1976.

TABLE 5

Business Activity 1943-1976

	Arvin				Dinuba			
	1943	1961	1970	1976	1943	1960	1970	1976
# Retail outlets		71	56	58		124	113	126
# Total outlets	62	105	86	96	141	193	186	222
Gross volume retail sales ($000)		3,378	5,090	12,577		8,938	11,167	24,181
Gross volume total sales ($000)	2,535	3,707	5,346	15,908	4,383	10,214	12,491	27,021

Source: State Board of Equalization.

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[1] Telephone conversations with Mr. Bill Wheeler, City Planner for Dinuba, and the Kern County Planning Department affirmed the Self-Help Enterprises small/large farm findings.

Associating gross volume of retail sales with resident population, we found $808 and $2,646 spent per person in Arvin in 1943 and 1976, respectively, and $1,169 and $3,146 spent in Dinuba in 1943 and 1976.

There are several possible explanations as to why Arvin residents spend less money in their community than do Dinubans. An obvious answer lies in the fact that Arvin has a lower per capita income and thus reduced consumption. However, this does not explain the great disparity in the number of total business outlets between the two communities, even discounting differences in population size (Arvin has one business outlet per 63 residents compared to one per 39 for Dinuba). A more reasonable explanation is derived from the scale of the farm operation itself. Since larger farms often purchase supplies in volume from wholesale distributors, "leakages" ocur which divert business away from the local community. As a result, buying and financing linkages with the Arvin trade area are bypassed, as described in the following account of a Farmers' Home Administration administrator:

> "The managers of large-scale corporation farms deal directly with the wholesalers or even the manufacturers of the products they need. In an area where corporation farms dominate there is no place for the village farm-supply dealer, the coop grain elevator, the small banker. You simply cannot have corporation farms and small-business enterprises cheek and jowl. On the other hand, where family farms thrive, small businesses flourish, too."[1]

Local Political Participation

Goldschmidt discovered that a more vital social life existed in Dinuba than in Arvin. He found this vitality to be an outgrowth of the interdependent network of social organizations within the community, the high degree of civic interest, and the responsiveness of local government to the general public within the area. In contrast, Arvin was shown to be relatively monolithic and segregated in its social organization and participation.

The information presented here represents proxy measurements of those social characteristics compared in the original study. The voter participation figures from the last general election measure the relative degree of citizen support in the two communities. The information shows that Dinuba had a higher ratio of those voting to those registered of voting age.

1976 Voter Participation

	# Registered	# Registered/ # Voting Age	# Voted	% Voted/Registered
Arvin	1,454	42.4%	1,095	75.3
Dinuba	2,998	54.5%	2,725	90.9

Source: Clerk's office of Tulare & Kern Counties.

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[1] Select Committee on Small Business, United States Senate, "Impact of Corporation Farming on Small Business", U.S. Government Printing Office: Washington, 1969, p. 9.

This reaffirms the original study's finding that the people of Dinuba had greater civic interest than those of Arvin in matters that directly and indirectly affected their lives. In comparing voter participation figures it should be kept in mind that Dinuba was incorporated in 1906 and consequently has had a longer history of municipal elections and services relative to Arvin, a community more recently incorporated (1961).

Because Arvin established its municipal government much later than Dinuba, a proliferation of special districts sprung up preceding its incorporation in response to the demand for services. Arvin, a community of approximately 6,000, is currently served by eight special districts.

The fragmented delivery system for services in Arvin is in part a result of the land-ownership pattern and the lack of civic unity identified in Goldschmidt's original research. Inefficiency and confusion in the decision-making process have resulted when policy boards were splintered and removed from the general public. Consequently, single-purpose districts are frequently controlled by special-interest clients that have little commitment to the broader service responsibilities of local general-purpose government. These observations are not only documented in small-town decision-making case studies and Senate testimonies, but are also illustrated here by looking at the decision-making structures of some of the special districts in Arvin.[1]

Three special districts in Arvin provide approximately the same services that the City of Dinuba furnishes for its population: the Arvin Community Service District (municipal water), Arvin County Sanitation District (sewer), and Bear Mountain Park and Recreation District (recreation). In addition, irrigation is supplied to farm land by the Arvin Edison Water Storage District, a key service delivery stressed in the original work. The board of directors of the districts include three members for sanitation, five members for municipal water, and five members for recreation, totaling 13 members affecting budget and other policy decisions in the Arvin area (in addition to the five City Council members). This stands in contrast with the five City Council members who make comparable service decisions for Dinuba.

Elections are another matter. The Arvin city planner could not remember when the last Community Service District election was held. The sanitation district, administered by Kern County Public Works Department, specifies that its board of directors is composed of the supervisor from the area, the mayor and one councilman from the City of Arvin. The recreation district held elections last year.

The Arvin Edison Water Storage District is perhaps the most interesting decision-making structure because water supply and transfer are so pivotal to large-tract farming. The irrigation district has two functions, recharging the underground water supply and channeling surface water from the Friant-Kern Canal and the California Aqueduct to adjacent farms. Decisions are made by a board of directors consisting of nine members representing nine divisions within the approximately 206-square-mile district. Elections are based on one vote per $100 assessed property value. Elections have not been held since 1942. As one local official explained, board members serve until the landowners decide to appoint someone else.

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[1] Loc. cit.

The relative revenue-generating capacity of the two communities produces another important comparison, even though neither levels of city expenditure nor data on taxation were collected in Goldschmidt's original study. However, the report of a subsequent Select Committee on Small Business alluded to the threat of an eroded tax base as a result of the removal of family-farm buildings from large tracts acquired by company farms and small business closeouts resulting when company farms take their business outside the community.

Consequently, this part of the report will focus on revenue sources, specifically the property values and local tax rates of Arvin and Dinuba, along with supplemental revenues accrued by special districts and other outside sources. Data on the 1974/75 revenue sources of the two cities show that Dinuba has greater municipal wealth than Arvin: $1,357,193, or $152 per capita, compared to $526,267, or $87.52 per capita. The sources of Dinuba's wealth are mostly spread among four funding categories; property taxes, other taxes including sales and business, service charges to users, and county, state and federal sources of income. In contrast, Arvin is dependent for approximately 80% of its municipal revenue on only two categories; sales and business taxes, and other agency sources.

However, a comparison of municipal revenue sources alone is misleading because Arvin relies heavily on special district support as well as federal aid. The municipal water and sewer districts serve approximately the incorporated area of Arvin, and the parks and recreation district covers a 424-mile area which includes Lamont, Arvin, and Weedpatch. As mentioned previously, these special districts provide the same services to Arvin as the City of Dinuba extends to its residents. When these special district revenue sources are added to municipal revenue, the per capita level in Arvin increases to $133.35.

These 1974/75 revenue comparisons do not reflect the present situation, however. Arvin is currently on a federal funding string, with several million dollars in aid going into upgrading the housing stock, revitalizing the business district, constructing a park, building a senior citizens center, and improving street and police service. It appears, then, that the large-farm community's dependency on outside sources of income has increased dramatically in recent years, while the small-farm community's revenue picture has remained relatively self-sufficient.

Social Activity

Another major finding of the 1945 Arvin-Dinuba Study was that the small-farm community had more and better churches, schools, and other civic and social organizations at a time when their population was nearly equivalent.

Qualitative evidence is not available for this report unless values of community diversity and interdependence are ones that people commonly hold, because Dinuba clearly has a greater number of active interests than Arvin. The following list shows the number of social, service, and civic enterprises in the two communities. In comparing the numbers, keep in mind that Arvin has approximately 2,500 fewer people today than Dinuba. Nevertheless, the great discrepancy in the number of churches, parks and playgrounds, schools, civic organizations, and medical services is significant.

TABLE 6

Number of Social, Service and Civic Enterprises[1]

	# Dinuba	# Arvin
Churches	28	12
Parks	5	2
Playgrounds	8	0
Theaters	2	1
Newspapers	2	1
Libraries	1	1
Radio stations	1	0
General hospitals	5	2
Physicians/surgeons	5	1
Dentists	2	1
Optometrists	2	1
Chiropractors	2	1
Elementary schools	4	2
Jr. high schools	1	0
High schools	1	1
Civic/social organizations[2]	40	7

Note: Dinuba also has a dental lab, convalescent hospital, and five rest homes.

Source: [1] Arvin & Dinuba Economic Profiles.

[2] Number of Dinuba civic organizations was obtained from 1976-77 Rainsinland U.S.A., the annual magazine of the Dinuba Chamber of Commerce. Arvin's Chamber of Commerce did not have comparable information; Greg Lee, City Planner of Arvin could only name seven civic organizations.

Conclusions

This brief historic overview demonstrates that the disparity in local economic activity, civic participation, and quality of life between Arvin and Dinuba found by Dr. Goldschmidt in 1945 remains today. In fact, the disparity is greater. The economic and social gaps have widened. There can be little doubt about the relative effects of farm size and farm ownership on the communities of Arvin and Dinuba.

A study of only two communities, however, is not a sufficient information base from which to draw general conclusions about the effects of farm size on local community life. To examine this relationship further and to test Dr. Goldschmidt's original thesis, studies were begun five years ago at the University of California at Davis under the direction of sociologist Isao Fujimoto. Researchers studied 130 communities of the San Joaquin Valley to determine the effects of a variety of factors, including farm size, on the economic and social life of rural communities. This study was concluded in the spring of 1977, and the findings were made available to the Community Services Task Force by Professor Fujimoto, who was a Task Force member.

U.C. DAVIS STUDY

Though there are many images and impressions of California, one universally accepted impression is of the diversity and richness of its people, resources, and agriculture. Contrary to notions that farming is mainly economic, agriculture in California does not exist separate from its communities or its people. The social implications related to the use of our resources, especially land and water, are also related to the questions being raised about both short-term and long-term gains and costs regarding agriculture and especially the place of family farms in California's Central Valley.

In regard to the relations between agriculture and people, observers have not been uniform about what they see. One relationship that has been pointed out is that between land ownership and quality of community life. For example, differences have been noted between communities on the east side and west side of the San Joaquin Valley. Communities where family farms predominate, such as on the east side of Fresno County, are seen as being quite different from those towns west of Highway 99 where the scale of agriculture is larger. Differences are noted in the number of services, the degree of participation of people in the affairs of the community, and even in farmer-labor relations.

Today, some 30 years after Goldschmidt's classic study of Arvin and Dinuba, questions concerning land use and community life continue to be raised. Agriculture remains dominant in the San Joaquin Valley where its eight counties still are among the most agriculturally-productive anywhere in the country. In 1975, this area accounted for 42% of California's total agricultural output and half of the State's irrigated acreage and also used nearly half of the State's irrigation water. In 1976, the eight counties produced $4.3 billion worth of agricultural commodities nearly one-twentieth of the total U.S. agricultural output. In terms of money value of their agricultural products, Fresno, Tulare, and Kern Counties ranked first, second, and third of all counties in the country.

Meanwhile, much has also changed, particularly in the structure of agriculture. Terms such as vertical integration, agribusiness, and corporate involvement in farming are relatively new. Furthermore, there has been increasing consolidation of land holdings, a move toward large-scale farm operations, and greater mechanization. With these added dimensions, Goldschmidt's observations concerning the relationship between land use and community become more relevant today.

Our study of 130 towns in the eight San Joaquin Valley counties has proceeded with the preceding context as background. The study is related conceptually to Goldschmidt's earlier work on Arvin and Dinuba. Goldschmidt's case study of the two towns examined how size of land holdings affected the quality of life in the two communities. Our current study expands on Goldschmidt by considering the universe of towns in the San Joaquin Valley and views three major variables: land use as indicated by the scale of cropping patterns around the towns, the politics of water as denoted by the system of water jurisdiction, and the structure and quality of community life as measured by services offered. The cropping patterns and water systems are used as independent variables with the complexity of towns as the dependent variable.

We considered all of the eight counties in the San Joaquin Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and Kern. Our universe of 130 towns was selected out of approximately 150 valley towns, primarily on the basis of availability of data. The communities range from Woodbridge and Lockeford in San Joaquin County in the north, to Arvin in Kern County in the south. The most westerly town is Coalinga, and the most easterly is Three Rivers.

The study's intent in looking at these towns was to examine the relationship between the control of the major agriculture resources, namely land and water, and the quality of community life. The guiding hypotheses of the study are that the social and political dimensions of agriculture are as important as the economic and production features and that the quality of community life is very much influenced by the way in which land and water resources are utilized. Namely, in those towns surrounded by small-scale farming operations and democratic water systems, the quality of community life is different from that in towns located in areas where the cropping pattern is large and the water system in non-democratic.

The complexity of a community is indicative of the options and choices available, which in turn is indicative of the quality of life. The more differentiated communities in the San Joaquin Valley include Fresno, Visalia, Stockton, Madera and Bakersfield. Towns in the mid-range of complexity include Arvin, Parlier, Mendota, and Livingston, among others. There are a great many towns in the Valley which rank low in their choice of services. These include places such as Five Points, Cantua Creek, Burrel, and Alpaugh. A handful of communities at the bottom of the scale provide no services at all.

In determining the dominant cropping patterns surrounding a community, a radius of approximately three and one-half sections from a town was examined. If the pattern of cropping was predominantly a section (640 acres) or larger, the farming scale was considered large. If the pattern involved a mixture of parcels approximating quarter sections (160 acres) or less, the cropping pattern was considered small. The cropping pattern was derived from the most current cropping pattern maps obtained from the California Department of Water Resources. These maps are based on aerial photographs for every section of the Valley.

For the water-use variable, our study benefited from the pioneer work done on California water districts by Merrill Goodall, James Jamieson, and Tim DeYoung.[1] The work done by Goodall and his associates at Claremont College provided us with an insight regarding the importance of water jurisdictions and their politics in the development of communities. For the purpose of our study, we have labeled those in which voting is based on property considerations--acreage or monetary worth of land--as non-democratic. The voting criteria are of particular relevance to community development. Although water districts are charged predominantly with water-resource activities, they have recently tended to assume many of the features of general municipal governments and to provide the basic services normally assumed by cities, such as sewage disposal, police, fire protection, construction and maintenance of streets and roads, the provision of recreation and park facilities, and library and ambulance services. In our study area there are approximately 64 democratic water districts and 89 non-democratic water systems. Whether a district is democratic or not can be determined by the name of the district. For example, the label "water district," as in "Westlands Water District," denotes a district where voting is based on property qualifications. The name "irrigation district," on the other hand, indicates a jurisdiction where voting is on a one person, one vote, basis. The water jurisdictions in the San Joaquin Valley can be summarized as follows:

Democratic		Non-Democratic	
Irrigation Districts	48	Water Districts	75
County Water Districts	15	Water Service Districts	14
Municipal Utility Districts	1		
	64		89

The clear pattern that emerges from our analysis is that there is a definite connection between the conditions of agricultural land and water use and the community situation. In places where the scale of farming is large and irrigation is based on a voting system weighted according to money or acreage, communities are fewer and farther apart and less developed than communities of comparable population located in places where the farm operations are smaller and irrigation is more democratically controlled.

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[1] See Goodall and Jamieson, "Property Qualification Voting in Rural California's Water Districts," Land Economics, Vol. L, No. 3, August 1974, pp. 292-294; Goodall, Sullivan, and DeYoung, Water Districts in California: An Analysis by Type of Enabling Act and Political Decision Process, a study completed for the State of California Department of Water Resources, Contract #B52232, March 29, 1972; Timothy John DeYoung, Property Qualification Water District in California, Phd.D. dissertation done in the Government Department of the Clearmont Graduate School, Claremont, CA 1977.

Towns in the San Joaquin Valley can be classified by the characteristics of community complexities, average farm size, and whether or not the water utility is democratically controlled. The distribution of the towns in the Valley according to these three characteristics can be summarized as follows:

LARGE FARM AREA

	No. of Towns
Complex/non-democratic	9
Complex/democratic	3
Simpler/non-democratic	6
Simpler/democratic	12

SMALL FARM AREA

	No. of Towns
Complex/non-democratic	7
Complex/democratic	36
Simpler/non-democratic	5
Simpler/democratic	36

It is clear from this chart that community formation takes place more often in areas where smaller farms predominate and where control of the water system is more widely spread. The actual communities of the study group are arranged graphically by these characteristics in Diagram I.

What difference do these factors make in the variety of services offered by a given community? To answer this question, a detailed comparison of 17 basic social services was made for large-farm and small-farm communities. Communities were selected to represent nearly identical populations and to correct for bias that would result from the larger number of communities in small-farm areas. The comparison of these services is illustrated in the following graphs. The graphs are accompanied by an explanation of the information displayed.

Graphs I, II, and III

Each of the graphs shows the number of services available per town based on the independent variables of land and water.

Graph I illustrates services available for towns in (1) cropping pattern areas of 640+ acres, and (2) areas of less than 1/4 section (160 acres). The 640+-acre group had 30 towns with a total population of 82,644. The 1/4 section group was controlled for a population bias by selecting 24 towns with a total population of 80,945. The towns used can be isolated by referring back to Diagram I. All towns falling in the 640+ matrix were used. For the 1/4 section group, all towns falling in cells B and D were used along with the following towns from cells F and H:

Cell F

-Reedley
-Parlier
-Fowler
-Kerman
-Tracy
-Ceres
-Dinuba
-Lindsay

Cell H

-Armona
-Stratford
-Waterford
-Denair
-Salida
-Ivanhoe
-Pixley
-Three Rivers

Graph II looks at the water systems as they are divided into non-democratic systems and democratic systems. The non-democratic has 25 towns with a total population of 126,910 and uses all the towns in cells A, B, C, and D. The democratic group has 34 towns with a total population of 127,319. In controlling for population in the democratic group all towns in cells G and E were used with the following towns selected from cells F and H:

Cell F

-Reedley
-Kingsburg
-Los Banos
-Manteca
-Oakdale
-Fowler
-Kerman
-Tracy
-Ceres
-Dinuba
-Lindsay

Cell H

-Armona
-Grangerville
-Lockeford
-Earlimart
-Terra Bella
-Stratford
-Waterford
-Denair
-Salida
-Ivanhoe
-Pixley
-Three Rivers

Graph III looks at the extremes of land and water use by taking just those towns in the 640+/non-demo cells of the matrix (cells A and C) and those towns in the 1/4 section/demo cells (cells F and H). Fifteen towns were in cells A and C with a total population of 58,565 and 15 were selected from cells F and H with a total population of 60,100. The 15 towns selected were:

Cell F

-Fowler
-Kerman
-Reedly
-Tracy
-Ceres
-Dinuba
-Lindsay

Cell H

-Stratford
-Waterford
-Denair
-Salida
-Ivanhoe
-Pixley
-Three Rivers

Two-Town Comparison

What does it mean to actually live in a town that falls into one of the eight different cells in Diagram I? By taking two average towns from our sample we can get a better idea of what a town is like that is surrounded

DIAGRAM I
(page 1)

TOWNS OF HIGH COMPLEXITY

NON-DEMOCRATIC WATER DISTRICTS

CROPPING PATTERNS OF 640+ ACRES

CELL A

COUNTY Town	Population	Predominate Land Use
FRESNO		
Coalinga	6,350	Grain & Field
Huron	1,700	Grain/Pasture
KERN		
Arvin	5,400	Vines & Field
KINGS		
Averal	3,100	Grain
MERCED		
Dos Palos	3,300	Field - Rice
SAN JOAQUIN		
Lodi	30,000	Vines (Grains)
STANISLAUS		
Patterson	3,900	Truck crops

CROPPING PATTERNS OF LESS THAN $\frac{1}{4}$ SECTION

CELL B

COUNTY Town	Population	Predominate Land Use
FRESNO		
Mendota	3,200	Grain (Field)
KERN		
LaMont	8,900	Vines (Field)
MADERA		
Chowchilla	4,550	Field (Pasture)
SAN JOAQUIN		
Linden	490	Fruits (Field)
TULARE		
Farmersville	3,750	Fruits
Porterville	13,200	Citrus & Vines
Visalia	32,900	Fruits & Dairy

DEMOCRATIC WATER DISTRICTS

CELL E

FRESNO		
Carruthers	940	Vines (Dairy)
Firebaugh	3,240	Truck crops
KERN		
McFarlands	4,300	Vines & Field
KINGS		
Corcoran	5,350	Field Grain
STANISLAUS		
Newman	2,700	Pasture & Truck

CELL F

FRESNO		
Clovis	18,100	Fruits & Vines
Fowler	2,300	Vines (Fruits)
Kerman	2,600	Vines & Pasture
Kingsburg	4,100	Vines (Fruits)
Orange Cove	4,500	Citrus (Vines)
Parlier	2,100	Vines (Fruits)
Reedly	8,400	Vines (Fruits)
Riverdale	1,700	Pasture - Dairy
Sanger	10,700	Vines (Citrus)
Selma	8,000	Vines (Fruits)
KERN		
Delano	15,400	Vines
Oildale	29,000	Vines & Field
Shafter	5,800	Vines & Truck
Wasco	8,600	Vines & Truck
KINGS		
LeMoore	4,680	Fields & Pasture
MADERA		
Madera	16,044	Vines (Grains)
MERCED		
Atwater	14,300	Dairy
Gustine	2,900	Field
Livingston	3,000	Vines (Fruits)
Los Banos	10,000	Dairy Pasture
Merced	28,000	Dairy Pasture
SAN JOAQUIN		
Manteca	16,000	Pasture & Vines
Ripon	2,800	Vines & Fruit
Tracy	15,000	Truck & Field
Escalon	2,500	Vines & Fruit
STANISLAUS		
Ceres	7,800	Vines
Oakdale	7,100	Fruits
Riverbank	4,240	Fruits
Turlock	20,600	Field & Vines
TULARE		
Cutler	2,700	Vines (Fruits)
Dinuba	8,100	Vines & Fruit
Exeter	4,600	Fruit & Vines
Lindsay	5,100	Citrus
Orosi	3,000	Vines (Citrus)
Stratmore	1,250	Citrus
Woodlake	3,500	Citrus

DIAGRAM I
(page 2)

TOWNS OF LOW COMPLEXITY

NON-DEMOCRATIC WATER DISTRICTS

CROPPING PATTERNS OF 640+ ACRES

CELL C

COUNTY Town	Population	Predominate Land Use
FRESNO		
Five Points	40	Grain
Raisin City	225	Vines (Pasture)
Tranquility	760	Field (Pasture)
KERN		
Edison	1,000	Truck (Vine)
Kettleman City	640	Grain & Field
SAN JOAQUIN		
Victor	290	Vines
Woodbridge	1,400	Vines
STANISLAUS		
Crow's Landing	460	Grain & Field

CROPPING PATTERNS OF LESS THAN ¼ SECTION

CELL D

COUNTY Town	Population	Predominate Land Use
MERCED		
Balhico	175	Vines & Fruits
Le Grand	1,000	Fruits (Pasture)
Stevenson	180	Pasture & Vines

DEMOCRATIC WATER DISTRICTS

CROPPING PATTERNS OF 640+ ACRES

CELL G

COUNTY Town	Population	Predominate Land Use
FRESNO		
Herndon	540	Fruits/Vines
Highway City	1,290	Fruits
Laton	1,200	Field/Vines
San Joaquin	1,550	Field/Grain
TULARE		
Richgrove	1,050	Vines/Fruits
STANISLAUS		
Westly	930	Truck
SAN JOAQUIN		
Acampo	310	Vines (Fruits)
Holt	260	Field/Truck
Terminous	250	Field (Truck)
Vernalis	169	Field (Grain)

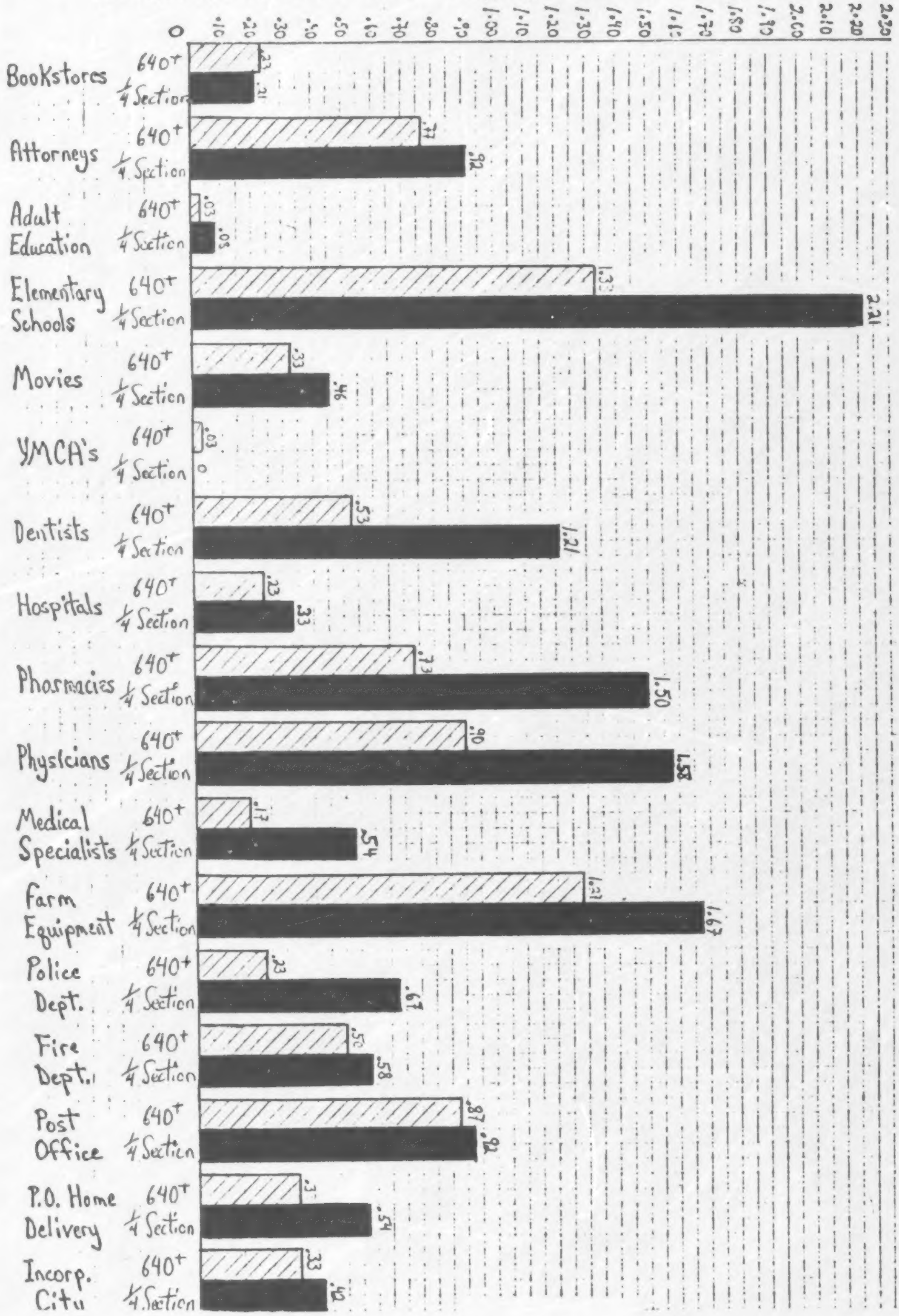
CROPPING PATTERNS OF LESS THAN ¼ SECTION

CELL H

COUNTY Town	Population	Predominate Land Use
FRESNO		
Burrell	150	Vines & Field
Del Rey	900	Vines (Fruit)
Easton	1,070	Vines (Field)
Malaga	793	Vines (Fruits)
KINGS		
Armona	1,500	Field (Dairy)
Grangerville	100	Vine (Field)
Stratford	700	Field & Grain
Yettem	353	Grain & Field
MERCED		
Delhi	2,050	Fruits (Vines)
El Hido	95	Pasture (Field)
Hilmar	800	Field & Grain
Irwin	250	Dairy (Grain)
Planada	3,050	Fruits & Dairy
Winton		Fruits
SAN JOAQUIN		
Banta	170	Field (Truck)
Clements	160	Pasture (Grain)
French Camp	1,000	
Farmington	180	Pasture (Grain)
Lathrop	2,100	Pasture
Lockeford	890	Truck & Citrus
STANISLAUS		
Denair	1,100	Truck - Fruit
Empire	2,000	Fruits
Hickman	230	Fruits
Keyes	1,900	Vines (Fruit)
Salida	1,550	Grain (Field)
Valley Home	175	Pasture
Waterford	2,300	Fruits
TULARE		
Alpaugh	737	Grain (Field)
Earlimart	3,100	Vines (Field)
Ivanhoe	1,600	Citrus (Fruit)
Goshen	1,550	Pasture
Lemon Cove	190	Citrus
Pixley	1,650	Field/Pasture
Poplar	1,425	Fruit/Vines
Sultana	310	Vines & Fruits
Terra Bella	1,050	Citrus
Three Rivers	1,400	Citrus & Field
Tipton	950	Pasture & Field
London Colony	726	Pasture & Vine

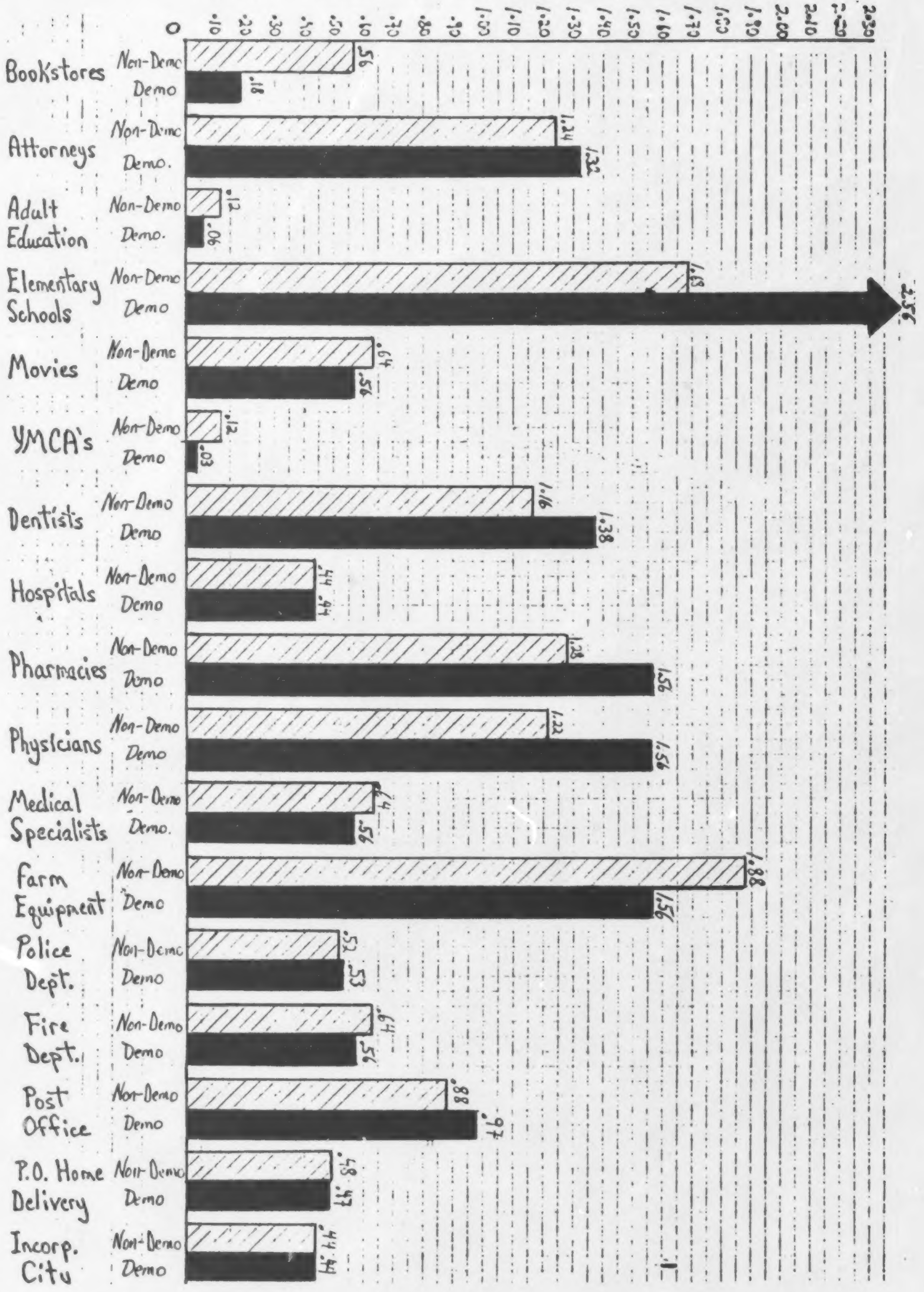
GRAPH I

Services Available Per Town: Cropping Pattern Use Categories



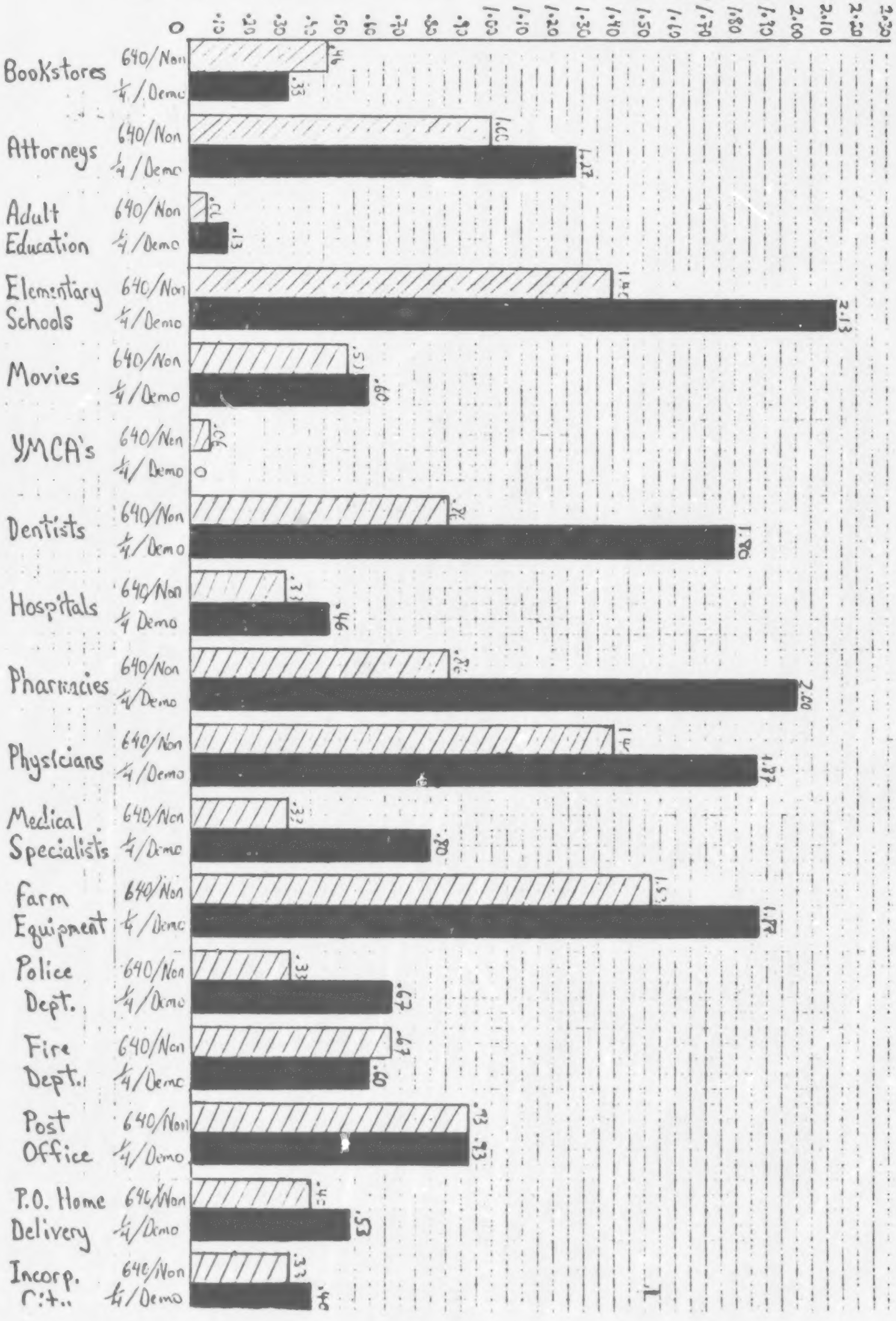
GRAPH II

Services Available Per Town: Water System Category



GRAPH III

Services Available Per Town: Land and Water Categories



by different mixes of our variables. The two towns were selected from the two most divergent cells: Cell C with a cropping pattern of 640+ acres and a nondemocratic water system and Cell F with a cropping pattern of 1/4 section or less and a democratic water system. Each of the possible offerings a town could provide have been catagorized into services, businesses, facilities and clubs in order to delineate the data we have collected.

In the town surrounded by cropping patterns of 640+ and a nondemocratic water system the following are offered:

Services
Post Office
Elementary School
Elem. Sch. District

Businesses

Facilities

Clubs
4-H

In the town surrounded by a cropping pattern of 1/4 section or less and a democratic water system the following are offered:

Services
Elem. Sch.s (2)
Dentist
Health Clinic
Pharmacy
Ag. Consultant
Farm Labor Office
Churches (3)
Health Services
Social Services
Police Dept.
Fire Dept.
Post Office
P.O. Home Delivery
Newspaper
Town Festival

Businesses
Department store
Hardware stores (2)
Grocery stores (3)
Lumber store
Beauty salons (2)
Funeral home
Plumber
Welder
Body & paint shop
Oil - gas station
Garage
Parts store
Bars (4)
Cafes (2)
Fast-food chain (2)
Movies
Processors
Crop Dusters (2)
Farm Equipment
Farm Equipment repair
Irrigation system
Labor Contractor
Dealers/Brokers
Bank (chain)

Facilities
Incorporated City
Local Government
Community Center

Clubs
4-H

Summary of Findings

Despite the immensity of data and the variety of communities, all the towns in the San Joaquin Valley can be ranked along the general dimension of community complexity. A community's complexity can be interpreted as an indicator of the options and choices available in the community as well as a measure of the quality of life. For the purpose of categorizing the communities, the universe of 130 towns was divided into two groups according to high or low complexity. The presence of a high school and whether or not a town was incorporated served as a cut-off point. With one exception, all the towns identified as low in complexity were also unincorporated.

The diagram showing eight categories of towns graphically illustrates the relationship between towns and the type of land and water use. Towns exist where there are smaller cropping patterns and democratic water systems. In contrast, in those areas where the cropping pattern is large and the water system is nondemocratic, there are very few communities. We find a total of 15 towns located in those areas where the cropping patterns surrounding the town is 640 acres or more and the water system is nondemocratic. In contrast, 74 towns are in areas characterized by cropping patterns of less than a quarter section and where the water jurisdiction is democratic.

The sizes of cropping patterns and their relation to community services show a number of significant differences, mainly that a greater proportion of services are consistently found in those groups of towns surrounded by small cropping patterns. Though not as great a difference is shown in those places where the water variable is examined, democratic water system areas nevertheless have as many categories of services showing noticeable differences as those towns surrounded by nondemocratic water system.

When both water and land factors are combined as they are in Graph III, there is a significantly greater variety of services which are better represented in those towns where democratic usage of resources prevails. Thus, in all three graphs we see a pattern of advantage going to those communities which are associated with either smaller scale operations or democratic water usage or both.

In comparing across all three of the graphs the services which are consistently different in any two categories of communities, four services stand out. Not only are the differences between the columns large, but because they involve very basic services, the differences are worth noting. These four services are elementary schools, dentists, pharmacies, and physicians. It is useful to note which category of towns repeatedly offers significant differences in services. Invariably greater numbers of services are associated with the towns which are identified with democratic water systems and where the cropping pattern is small.

An historical footnote, however, must also be inserted. Since many of the first towns in the Valley developed where water was available, they do have an historical advantage. But at the same time, if we are to assume that just the absence of water precludes the development of towns, it can also be concluded that there should have been a flurry of small-town development when water was introduced via the water projects. In actuality, new towns have not been developing. Hence, we must go back to our two independent variables and conclude that these features, large versus small-scale farming and democratic versus nondemocratic water systems, have a definite impact on the development of local towns. As stated at the start, agriculture, land, water, and community are not separate entities but have an impact on each other.

This leads to a discussion of the quality of community life. For a town to be an attractive place to live and to encourage more people to choose to live there, it must offer features the residents desire. If a town lacks some of the most basic community resources, there is little doubt that it is not providing much that adds to the choices that make living in the town attractive. When looking at the numerous differences in the presence and number of basic services offered by those towns in democratic water systems and with smaller scale cropping patterns (Graphs I, II, and III), we must conclude that such towns must be offering more possibilities for a better quality of life than the towns associated with the opposite situation.

Interpreted from the perspective of residents, this means if one lives in an area surrounded by a water system that is democratic, one would more likely have access to elementary schools, dentists, and pharmacies than if he lived in an area surrounded by nondemocratic water systems. If the residents of a community are surrounded by a smaller scale cropping pattern, they may have more access to 15 out of the 17 basic services than if they were located in large-scale, nondemocratic areas.

If communities located in democratic and smaller cropping areas are able to offer more in the way of very basic services, then it would appear that they would also be offering a much higher quality of life than those in nondemocratic, large-scale farming areas. An important point to note here is that there is no advantage and, in as many as 15 out of 17 services, there is a disadvantage in living in a large land-use pattern area. Many have argued that large businesses are a financial boon to an area. Whether this assumption is valid or not, the suggestion here is that large-scale farming may have a less positive effect on the local community than small-scale farming. Large-scale agriculture offers the local communities no substantial advantage. The smaller scale farming areas clearly tend to offer more to the local communities than their larger counterparts.

As demonstrated in previous sections of this report, a considerable amount of economic activity could be expected to occur spontaneously as a result of changing from a pattern of large scale farming to one in which farms were of a more moderate size. Another study conducted in 1976 by economist George Goldman and others at the University of California, Berkeley, specifically analyzed the effects that could be expected from a reduction in average farm size.[1] Using an input-output method of analysis, Goldman and his associates estimated the effects on the economy of Fresno County that could be expected from the conversion of 30,000 acres from farms averaging 1,280 acres to ones averaging 320 acres. They found that this conversion could be expected to generate 540 new jobs within the county and to increase retail sales by $16 million annually. Total personal income would rise by $6.2 million per year. This could be accomplished without any significant changes in cropping patterns or other changes in local agriculture.

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[1] Economic Effects of Excess Land Sales in the Westland Water District, University of California, Berkeley, August, 1977.

The principal reason that such economic benefits can be expected is that a greater portion of profits and wages will be retained within the local economy, and the "multiplier effect" becomes operative. This type of shift in economic activity goes along with a shift to more local ownership of farms and service businesses and a shift to more family and resident labor from migratory farm labor.

Finally, the 1970 Census shows that areas having a high percentage of farmworkers in relation to farmers normally have larger numbers of families living below the poverty level than do regions having large numbers of farmers. (Areas with a relatively high number of farmworkers are normally dominated by larger-than-family farms.) For example, a "high-farmworker" district in Fresno County showed 22.2% of the population living below the poverty level, while the rate for a "high-farmer" district in the same county was 17.6%.[1] This compares with a poverty rate of 8.1% for urban areas of California. The portion of families living below the poverty level in this district was 2.74 times larger than the portion in urban areas and 26% higher than the high-farmer district. In addition, the median family income in the farmworker district was $1,457 (19%) lower than the median income in the farmer district--$6,255 and $7,712 respectively.

The studies and statistics cited here demonstrate clearly that there is a strong positive correlation between large-scale "industrialized" farming and rural poverty. The reasons for this relationship are relatively clear and have been discussed at length. Strengthening the competitive position of the family farm is clearly part of the solution, but what can be done to strengthen the community directly? The next section will discuss some suggested strategies.

III. ROADBLOCKS TO DEVELOPMENT

When small farms are replaced by larger farms, a process of economic and social decay begins in rural communities. As farm families move away, local businesses begin to dry up. Social organizations also begin to stagnate as opportunities and local revenues shrink. Public services are constricted by the reduction of the local tax base. As control of the land base is concentrated the probability of absentee ownership is increased. This erodes the local control of community residents and takes more money from the local economy. The population of the community becomes less stable as hired labor, often seasonal, replaces local labor, and average incomes tend to drop. This situation also prevails in areas of California that were developed originally into large farms.

The ecological and broader economic effects of this shift from small farms to large farms, as well as its causes, are examined by other task forces.

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[1] Source: U.S. Bureau of the Census, Census of Population and Housing, 1970. Final Report PHC (1)-75, Fresno, California, SMSA, 1972.

The effects of this process on farm communities are of concern here. Based on the farmer/community relationship, a small-farm policy implies a rural community-development policy. Therefore, the Task Force has concerned itself primarily with the problems of rural communities.

The problems of small, remote rural communities are legion, and most of them stem from the isolated nature of their existence and from their poverty. Isolated communities lack the opportunity to share or reciprocate services with neighboring communities. This generates a need for each community to provide a more complete range of public and private services and goods within its confines. The need for a local doctor is more acute, for example, if the nearest doctor is in another town fifty miles, rather than five miles, away. Since these communities are small by nature (averaging 5,000 to 8,000 people) and since the incidence of poverty tends to be high, it is difficult for them to provide the range of services for which there is a need.

Another characteristic that plagues rural communities is that the tax base often includes only residences and small businesses. The employment base, agricultural land, is normally located outside the taxing jurisdiction of small cities. Unlike a factory or commercial center employing an equivalent number of people, the land normally contributes taxes to the county rather than to the city. If the community is unincorporated, as many are, it receives services at a rate determined by the county. Either instance often leads to a low level of public services.

Small remote communities are also less effective than their larger counterparts in competing for outside assistance. State and Federal programs of assistance for local government rarely provide funding that is sufficient for the need. They are normally designed to provide help to the largest population that can be reached with limited funds. Grant applications are often evaluated on magnitude of potential impact rather than on severity of need. Small communities also frequently lack technical expertise in applying for funds, or they lack knowledge of what help is available. Finally, small poor communities have more difficulty in raising local matching funds.

Problems common to rural communities include housing shortages and substandard housing. This is particularly acute in towns having large numbers of seasonal farmworkers. Sewer and water systems are frequently inadequate, and health care may be very far away. Business failures are common, and employment has severe seasonal fluctuations. Additionally, costs for utilities, transportation, and retail food are high. Smaller local governments also frequently complain of burdens imposed by the need to comply with State and Federal requirements.

Analysis of requests received by the Federal Assistance Program Retrieval System (FAPRS) indicate the areas in which local community resources are most frequently inadequate by showing the areas in which communities seek outside help. Of the 206 requests received through three agencies, the categories in which most requests were received were "Planning and Technical Assistance" and "Community Facilities." Fewer requests were received in the categories of "Housing" and "Business and Industrial Development." The line items receiving most interest, in order of decending priority, were:

- construction or purchase of housing structures,
- community water supply,
- data and information,
- public buildings,
- human resources,
- repair/improvement/rehabilitation (housing),
- recreation,
- hospitals and health-related facilities,
- community facilities (planning),
- business and industrial development (planning).

The problems of rural communities fall mostly into the areas of developing a viable economic base and developing a public service infrastructure. Obviously, development of the local economy will reduce both the demand on Federal and State assistance for these communities and the level of unmet need. Encouragement of locally owned small farming is one strategy for fostering new or renewed economic activity in many rural communities.

Community Needs

The Task Force identified three basic needs of communities: (1) political self-determination, (2) economic self-reliance, and (3) social enrichment. Political self-determination requires the local control of community resources, including land and water in surrounding areas. For many communities it also requires the improvement of public management skills, greater prowess in negotiating with other levels of government, and innovative approaches to sharing resources with neighboring towns. Economic self-reliance will depend on developing the infrastructure to encourage private investment. Any future public policies that contemplate encouragement of investment in family farming should also include financial assistance for development of needed support businesses in rural communities. Social enrichment depends heavily on economic development. When the community has been stabilized and begins to support itself, residents can determine their own cultural needs and develop their own social institutions.

Limited Resources

A rural community operating under a public governmental structure has a broad range of financing mechanisms to choose from for developing the public "infrastructure." The primary source of revenue for a public body is its tax base. However, in most communities this base is not large enough to support ongoing operational costs, let alone capital-improvement costs. Therefore, a system of borrowing capital has been developed for public bodies which is usually referred to as "bonds."

There are basically two types of bonds: (1) those for which the entire community collectively secures the bond with its tax base and, (b) those for which the individual property owner secures the bond with an assessment on his property. Generally a community cannot use more than 20% of its tax base as collateral for bonds. The only limit on assessment bonds is the willingness of the property owners to accept them.

The amount of the capital required to construct physical improvements is staggering. A partial list would include:

Sewage treatment works	- $2,000 per family
Sewage collection system	- $2,000 per family
Water system	- $2,500 per family
Streets	- $1,500 per family
Street lighting	- $ 250 per family
TOTAL	$8,250

A community of 4,000 to 5,000 residents would require over $8 million to construct the basic items listed above. Schools, parks, civic buildings and medical facilities would add substantially to the total. The capital funds required to replace a community of 4,000 to 5,000 would be well over five times its tax base and in many rural areas might approach ten times its tax base.

The size of the costs involved in community development has forced more and more of the costs onto the individual consumer. This is done by assessment districts in existing areas or by requiring the developer to provide all services, the costs of which are financed by the consumer when houses, lots or facilities are purchased. In an existing community the value of the established areas tends to limit the amount of costs that can be passed on to new development. In an entirely new community it would be technically possible to finance the entire infrastructure out of the ultimate purchaser's pocket. However, the resultant mortgage costs would probably bankrupt the average rural resident.

Existing Federal and State programs designed to provide capital for rural development are based on single components. That is, each source will usually only provide for a single item such as a water system. These programs were developed over a long period as reactions to specific problem areas; therefore, a piecemeal table is set before the rural developer. The result is that each service is set out as a main dish, but the meal is not nutritious enough to sustain life.

A review of State and Federal programs reveals an impressive list of grants and low-interest loans. However, considering that total replacement costs or new development costs of infrastructure may approach $20,000 per family, the need for substantially larger grant programs is overwhelming. Also, an integrated, single source loan program could significantly reduce the amount of time and energy used to seek and obtain financing. The only purely rural programs are those of the Farmers Home Administration. The rest are programs primarily designed for urban areas which are twisted and turned to fit rural needs.

IV. STRENGTHENING LOCAL CAPACITY TO MEET LOCAL NEEDS: RECOMMENDATIONS OF THE COMMUNITY SERVICES TASK FORCE

It is the position of the Task Force that communities can be assisted most effectively if rural people are helped to help themselves. Only by building local problem-solving capacities will State and Federal assistance have a lasting and productive effect. In most areas of community assistance the State and Federal governments necessarily work through local government.

The Task Force has outlined three areas in which the State can help local communities build their problem-solving capacities. These areas are:

(1) improving community representation;
(2) restructuring local/State tax relationships; and
(3) encouraging economic development.

Task Force recommendations are structured around these development objectives.

Strengthening Local Representation

California local government should be reorganized as follows:

(1) create a new entity which does not participate in county government politically or financially;

(2) modify existing city/county laws so that equitable agreements for contracting of services is mandatory.

In analyzing the issues which are involved in the creation of quality rural life style, political independence and local autonomy were determined to be extremely important. One of the most striking findings to come out of the work of Isao Fujimoto is that the lower-ranking communities are almost all unincorporated. Also, small-town representatives pointed out the extreme struggle to survive. In rural California incorporated cities of less than 5,000 population can barely survive, yet in Minnesota an unincorporated city of 500 population can survive. The purpose of our recommendations to restructure California local government is to advocate and allow realistically for the survival of incorporated rural cities of about 1,000 population.

Many of California's rural counties have large urban centers which tend to control the political processes of the county. Also, residents of cities are double-taxed by their city and county and receive only minor service from the county. Urban and rural communities share some problems; however, most of them are unique. The creation of a "super" or "urban" city would allow for the separation of the two institutions. This new type of city would have all the responsibilities of existing cities and counties within its boundaries and would be able to replace all special districts with a single tax base. Contracts between "super cities" and counties would have to provide for such services as welfare, hospitals, etc. Though this proposal is generated from a rural perspective, it would, as a sidelight, be helpful in solving problems of county islands in cities.

Existing smaller cities and those created after the "super city" went into effect would essentially operate as before, except that duplicate taxes would not be allowed, and provisions for contracting of services on an equitable basis would be instituted. Currently, rural city residents must pay both county and city taxes and do not receive full county services. In disallowing duplication, each city and county would have to agree on the cost of services provided by the county to the city. Each city would be in a much better financial position. For example, one rural city recently negotiated with its county for the provision of sheriff's services to replace its police service. The county insisted that the full actual cost of the sheriff's service be charged, yet each city resident pays over $3.50 per $100 of assessed valuation in county taxes which provide for sheriff's services. Under the proposed changes, cities and counties would be separated; city residents therefore would not pay county taxes, and negotiations as above would be on an even basis.

Restructuring Local/State Tax Relationships

The first of the goals isolated in this Task Force report was that of facilitating political autonomy. Obviously, small-farm communities cannot be politically autonomous if they cannot afford adequate staffing to function effectively.

Similarly, the fourth problem area set out in the problem statement of this Task Force report is that of adequately financing the public sector in small-farm communities. The Task Force suggests that this problem cannot be dealt with without focusing on the structure and impact of state and local taxation.

The Task Force articulated as one of its aims making communities with populations as small as 2,500 viable political entities. Factors other than population play a large role in whether or not a community can afford political autonomy. The community's relationship to nearby regional centers and the presence or absence of an industrial property tax base will frequently play a far larger role than the number of individual taxpayers. Under current circumstances it is rare that a community as small as 2,500 can survive. In conversations with small-town city managers the Task Force was told that a community with purely residential property now needs in excess of 10,000 population to achieve viability. A number of communities in the 5,000 range continue to struggle for survival with rapidly decreasing prospects of success.

This situation is not the inevitable result of immutable economic forces. Other states with differing tax structures have succeeded in supporting a large number of small, decentralized communities. In Minnesota, for instance, the Task Force found communities as small as 500 surviving quite successfully because of peculiarities in that state's local government financing.

The Task Force considers the survival of small communities fundamental to the viability of the small farmer. The assumption of the Task Force is that in large-farm communities the owner frequently lives outside the area, and farmworkers typically are bussed to their workplace from neighboring regional centers. In the small-farm community, the owner/operator wants to live on or near his land and does not want to go great distances to hire his few employees; this creates a need for a variety of small satellite towns in addition to regional population centers. Although Isao Fujimoto's study was not compiled to examine this information, it shows that significant numbers of small farmers in areas of democratically controlled water districts and small farming patterns do currently choose to live in towns of under 5,000.

The existence of these small-farm communities in the past is no guarantee they will be able to survive in the future. Costs of local government administration are rising far faster than inflation, while the increase in revenues lags behind inflation. As an example, the insurance costs for the city of Woodlake over the last four years have risen from $6,000 to $30,000 per year, even in the face of a good claims record. Similarly, unionization of public employees has dramatically increased local government operating costs. At the same time, delays in increasing assessments to reflect the effects of inflation on property values cause property tax income to rise relatively slowly.

At the same time as escalating local-government operating costs threaten to leave the small community in the dust, a movement toward regional shopping centers has dramatically undercut the small-community tax base. Increased access to transportation and the acceptance of the regional shopping center has radically decreased the number of businesses and services a small town can support, as in the case of Woodlake, mentioned above. In recent years the only way marginal communities have stayed solvent has been through the use of federal revenue sharing, not to increase the services provided, but to pick up the deficit the community would otherwise face in providing existing services.

Much of this trend toward the demise of the small-farm community is exacerbated by the property and sales-tax structure. Local sales taxes are allocated among communities according to the dollar volume of sales occurring within their jurisdiction.[1] With the increase of regional shopping malls, sales taxes go disproportionately to the regional population centers where residents of small, outlying communities shop for goods and services. Unfortunately, the need for public services is more closely correlated to where people reside than to where they buy their cars and home appliances. Consumption patterns in the private sector are far different from consumption patterns in the public sector. Nevertheless, sales tax allocations follow not only private consumption but are required to finance the consumption of public services. You cannot send a resident to the regional population center to obtain his water and sewer service. For all of the basic local government services, the financial burden cannot be shifted to where the resident lives.

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[1] Bradley-Burns Uniform Local Sales and Use Tax Law, Revenue and Taxation Code 7200 *et seq.*

Similarly, the property tax is available to jurisdictions, given the same level of taxing effort, in proportion to their tax base rather than their need for services. Communities which are largely residential lack the business and industrial tax base which requires less in services than it pays in taxes.

The property-tax base of small communities is adversely affected not only by the concentration of businesses in regional population centers but also by the location of industrial facilities there. The assets of the employers in the small-farm community which might be equivalent to the industrial assets of the regional population center are largely farm land and equipment located outside the taxing jurisdiction of the public entity.

Because the allocation of sales and property taxes rewards those communities which house business and industry, small communities are forced into wasteful competition to attract these tax gold mines. Studies have shown that much of this competition has very little effect. It can be argued that this tax distortion is a healthy incentive to force small towns to develop the infrastructure necessary to serve residents as well as small businesses, to attract the mix of businesses necessary to maintain the town's viability. As a planning matter, however, at least in the case of industry, it makes much more sense to zone industry into areas where its operation will have minimal environmental impact.

In order to offset the effects of both the inadequate revenue sources of small towns and the undesirable impacts of the current sales and property tax allocation procedures, the Task Force recommends the following changes:

1. All State subventions to local government should be allocated in a manner that will guarantee to small communities a minimum level of funding sufficient to make the use of those funds effective. State subventions, like most other taxes, are apportioned among local jurisdictions on the basis of the volume of a type of transaction or population. The costs of operating overhead are proportionally higher for small communities. For small communities to survive, some source of revenue must be available in greater than proportional amounts to offset the extra cost. Altering the method of distribution of the State subventions is suggested as a way of ensuring viability without deterring residents of small communities by requiring a burdensome local tax effort. The State should determine what is a reasonable tax effort for these local communities and should set the minimum level of State subventions at a level that will enable that community to use the money effectively.

2. The State should investigate approaches to State revenue sharing at a level necessary to make small communities of 2,500 population viable. That this is possible without totally disrupting the State tax system is shown by the example of Minnesota. The state of Minnesota has consolidated most of the individual taxes, such as liquor, cigarette, bank excise, and gross earning taxes, which were previously distributed to local governments under various laws, into a single, local government aid program. In 1978, local

governments will receive $52 per person within their jurisdiction under this program. The Task Force has talked with a city manager in Minnesota who cites this aspect of Minnesota law as the one which most helps small communities to remain viable.

3. The State should investigate and experiment with means of pooling sales and property tax revenues on a regional basis and reallocating at least a major portion of the revenues on the basis of the cost of providing needed public services. This is the recommendation which deals directly with distortions caused by the structure of the local sales and property taxes. The Task Force does not have the resources to determine over how large an area these taxes should be pooled to avoid wasteful competition. The area appropriate for the sales tax should be the region within which individuals can reasonably be expected to travel for all shopping needs. As a matter of administrative simplicity this might be set at the county level. The area appropriate for the property tax is less clear.

Encouraging Economic Development

All of the studies cited in this report show a strong positive correlation between the family farm and healthy rural communities, but many rural communities today suffer the effects of decades of economic decline. Many are caught between the need to offer real incentives for private-sector investment and the perception that they have little to offer. This perception often overlooks substantial assets that the community may have or can develop.

No one economic development strategy is going to work for every community. The strengths and weaknesses of each must be analyzed individually, and an economic development program tailored to the needs of the community must be planned. The foregoing recommendations for improving political autonomy and local revenues can help, but many communities need technical assistance to make the most of their resources.

As discussed above, the Federal government offers various types of economic development assistance to rural communities, but gaining access to such help is often a complex and expensive process. One city manager of a small rural city told Task Force members that he could not afford to apply for a grant unless he was certain that it would be awarded. The Federal Assistance Program Retrieval System (FAPRS) is an important step toward improving this condition. It should be expanded and improved.

The State currently provides technical assistance in economic development to local communities through the Department of Housing and Community Development and the Employment Development Department. These programs need to be expanded. Beyond technical assistance the State could provide "seed money" to cover initial planning and development costs or "glue money" to fill the gaps in local and Federal funds. In this way the State can help to coordinate available assistance with local resources. A State rural development agency is one way to provide the necessary administrative talent and funds.

Lasting economic development must take place in the private sector. Public efforts can do much to facilitate private developments, but they are no substitute. Ultimately, a community must survive by the industry and ingenuity of its people.

Summary of Recommendations

In summary, the Community Services Task Force recommends that the State of California establish as policy the objective of improving the quality of public services as well as business and employment opportunities in rural communities to provide essential support for family-operated farms.

A. Local Government Structure

The primary instrument of public influence in rural areas is local government. Many remote rural communities are too small to legally incorporate as cities and many others find it economically infeasible to do so. Incorporation efforts are also often met with intense political opposition from other parts of the county. Unincorporated communities must rely heavily on decisions made in the county seat which is often far-removed geographically and, many complain, is even farther removed culturally. The Task Force recommends:

> The State should thoroughly reexamine the structure of local government in rural areas. Specific recommendations are as follows:
>
> 1. Reinstitute authority for a community to incorporate as a "town" rather than a city. The distinction between the two is that a town would not be required to provide all municipal services. Those services not assumed by the town would continue to be provided by the county or special districts at rates comparable with those that obtained before incorporation.
> 2. Provide for the separation of "super cities" (above 250,000 population) from the counties in which they are located to eliminate city domination of county government.
> 3. Provide relief from arbitrary decisions of LAFCO either through electoral initiative or through an appeals process.

B. Technical Assistance

Small local governments often suffer from a lack of knowledge about sources of assistance and do not gain the advantages of skillful management. Consulting services from private consultants are often beyond the financial means of small cities. For example, one city manager told members of the Task Force that he could not afford to hire a professional grant consultant to prepare an application unless he could be certain to receive a grant which would offset the cost of this service. Small cities are often in a similar position with engineers, planners, attorneys and other professionals, because they do not need these services on a full-time basis. The Task Force recommends:

The State should provide technical assistance to small local governments which do not need and cannot afford professional services on a regular basis. Such assistance should include management services, professional planning, grant preparation, etc. Such assistance should be provided by an agency with working knowledge of the special problems of rural communities.

C. Tax Revenues

Small rural cities often find themselves in a vicious cycle of small revenues and small-business activity. Unlike cities with an industrial economic base, communities that depend on farming generally have principal income-producing properties located outside their taxing authority. The small-city tax base is principally residential and small business. Small communities that lose business to their larger neighbors also lose sales taxes and various other State subventions. State subvention programs present opportunities to equalize tax impacts among communities of various sizes. The Task Force recommends:

The State should reexamine fiscal relationships with local governments. Specific recommendations:

1. Consider some form of revenue sharing to equalize the benefits of State subvention programs (sales tax, cigarette tax, gas tax, vehicle in lieu fees, etc.)

2. Consider permission of some form of local income tax.

D. Economic Development

The principal underlying cause of many problems faced by small rural communities is a low level of economic activity. Communities that produce raw material often do not capture jobs and profits that flow from the processing of those materials. Similarly, large farmers often bypass local supply outlets and buy inputs in bulk directly from wholesalers or manufacturers. With proper planning and necessary public services, many communities could capture this secondary activity to reduce their economic and fiscal problems. The Task Force recommends:

1. The State should actively assist small communities to plan and execute economic development programs.

2. The State should assist rural communities to upgrade public facilities and services. Technical assistance and "packaging" of existing federal assistance can accomplish much of what needs to be done, but some consideration should be given to State grant and loan programs where needed.